JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

Volume V MARCH, 1909. Number 9

ORIGINAL ARTICLES

ENDOCARDITIS.*

By J. S. Triplett, M. D., of Harrisonville, Mo.

Because it is followed by a comparatively high mortality; and also because those who fortunately survive the primary attack are unfortunately more or less incapacitated for active work for the remainder of their lives, is my apology for selecting the subject of endocarditis for your consideration at this time.

As no hard and fast line can be drawn between its varying degrees of virulency, no attempt at classification or division of the subject will be made, for the reason that a case of so-called simple acute endocarditis of rheumatic origin may pursue a benign course for several days or perhaps weeks, and then, consequent upon myocordial degeneration, very quickly terminate fatally; and on the other hand, one of the so-called malignant type, after a few days of alarming symptoms, may terminate in recovery, as regards life; but the heart may never regain its normal condition.

Jürgensen says: "If we admit the expressions benign and malignant, they must be applied only to a definite period of time, for that which applies to-day is no longer valid tomorrow." Writers are pretty well agreed that endocarditis is the local manifestation of a systemic or local infection; in other words, the results of colonization of pathogenic microorganisms upon the endocardium; that it is rarely, if indeed ever, a primary, but almost always a concomitant of an infection in some other part or parts of the body; and that, as needs must follow, it is not a separate and distinct pathologic entity.

The diseases in which endocarditis is a frequent complication are rheumatism (acute articular), pneumonia, chorea, scarlet fever, puerperal

*Read by title in the Medical Section, Fifty-first Annual Meeting, Springfield, May, 1908.

fever, tonsilitis and gonorrhea. Less frequently it may occur in the course of diphtheria, measles, influenza, smallpox, typhoid fever, erysipelas, periostitis, septic pyemia, and many others. In fact it is possible for any infection to act as a causative agent, especially if there be some predisposing factor. As there are so many diseases in which it may be a complication we would logically expect endocarditis to be of common occurrence. And so it is; but just what percentage of morbidity it constitutes I am unable to state. Endocarditis is associated with the symptom-complex which we call articular rheumatism oftener than with all other diseases combined. Whittaker says that from 60 to 85 per cent. of the cases are caused by rheumatism.

As yet we do not know the specific cause of rheumatism, and hence do not know the specific cause of those cases of endocarditis which accompany or closely follow it. But the clinical course of rheumatic fever so closely corresponds to that of known infectious diseases that most writers have accepted the germ theory as its cause.

Inasmuch as the cardiac symptoms, in some cases of rheumatic fever, come to notice prior to the involvement of the joints, we have room to speculate upon the question whether the diagnosis should be rheumatism or endocarditis. Would it not be quite as correct to say that the case is one of endocarditis complicated by arthritis or polyarthritis as the case might be, as to say it is one of rheumatism complicated by endocarditis? In the light of our present knowledge I think it would. It is quite probable that when we come to understand the nature of rheumatism as well as we now do that of malaria, the name of the one will be no less a misnomer than that of the other, as regards its etiologic significance.

The age at which endocarditis occurs most frequently corresponds to that of the disease of which it is a complication; hence we find the majority of the cases in the period between the third and fortieth years of life. It is seldom encountered in first infancy and in old age. We may say, then, that only to a limited extent is age a predisposing factor.

The site of the lesion, especially at the beginning of all endocardial inflammation, is most usually found upon the valve structures; and of these, upon that of the mitral most frequently. In very few cases, however, is the pathology limited to these structures. It is prone to extend to the adjacent endothelium, invade the myocardium and finally the pericardium. I think the assumption of myocardial degeneration best accounts for the various disturbances of the pulse and of the circulatory system. Jürgensen is so well convinced that endocarditis is not a separate entity that he says "pancarditis will be the diagnosis of the future."

Diagnosis. It is often very difficult, and in some cases, impossible to arrive at a correct diagnosis. Especially is this true during the first stage of an attack and when there are no obstructive symptoms to direct one's attention to the heart. It is very probable, also, that many slightly

developed cases pursue a benign course, recover without sclerotic valves and their true pathology remains unrecognized by the medical attendant, even when he has made careful and repeated examinations. Then there are cases of the septico-pyemic type in which there may be neither ausculatory nor percussion evidence of cardiac disease. However, the competent observer, who habitually examines the heart, will discover more cases and make a correct diagnosis earlier than the superficial and less skillful examiner.

Since many of the important symptoms often remain latent for variable lengths of time, and none are pathognomonic, the medical attendant will sometimes avoid embarrassment and humiliation by deferring a positive diagnosis until the case has further developed.

The first desideratum leading one to suspect endocardial inflammation is the presence of one of its causative diseases.

Weakness of the heart's action is observed in all cases. This is a cardinal symptom and should be of great diagnostic value. The pulse becomes irregular, compressible and its rate quickened, from which there result cyanosis and lowered temperature of the extremities. The apex impulse against the palpating hand is notably weakened, sometimes imperceptible. Palpitation, precordial pain and a feeling of anxiety are subjective symptoms of quite regular occurrence.

When, in addition to these symptoms, there is detected a roughened first sound gradually developing into a well marked systolic mitral murmur, the diagnosis is comparatively easy. The temperature curve is of little diagnostic import except in instances where it does not coincide with that of the primary disease.

On the part of the blood, a decided leucocytosis is usually present and the percentage of hemoglobin is diminished.

Prognosis. The immediate prognosis of simple acute endocarditis is usually favorable as regards life, but the remote prognosis on the other hand, is bad as regards both life and health inasmuch as it so frequently ends in chronic valve disease. Seventy-five per cent. of all cases recur.

The malignant cases may reach a fatal termination in a day or two, or again they may be prolonged for several months or even a year and then prove fatal. We are therefore never justified in giving any but a very guarded prognosis.

Treatment. In the management of endocarditis the most important as well as the most beneficial therapeutic measure which we can employ is rest.

If the profession has erred at all in the treatment of this diseaes, I believe that error has been the failure to insist upon and, if need be, enforce rest. There is no doubt in my mind but that many of the chronic cardiac lesions could have been prevented by rest at the proper time.

Rest, absolute and unconditional in the horizontal position, should be strictly enforced from the very beginning of cardiac symptoms until

fever has entirely disappeared. Even after fever has disappeared, if there is yet disturbance of the heart's action, rest in bed should still be enforced and maintained until such disturbances have subsided.

The amount of cardiac energy conserved by rest in the horizontal position is readily apparent when we recall that the healthy heart beats ten times more per minute in the standing than in the reclining position and 20 to 30 more per minute when fever is present. This means at the lowest estimate, when fever is present, that there will be saved by rest per minute 20, per hour 1,200, per day 28,800 cardiac contractions.

The medical treatment consists in the administration of the salicylates to the rheumatic, in addition to the general symptomatic treatment of all cases. Thus, pain, pyrexia, insomnia, etc., should be met by appropriate remedies.

The emunctories should be stimulated to gentle activity and suitable nourishment provided in all cases.

The treatment of endocarditis by raising the opsonic index by specific inoculation according to Wright's technic has been before the profession too short a time and used in too few cases for us to say just what position it will occupy as a therapeutic agent. The results, however, of this method have thus far been so favorable that we are encouraged to believe, where the technic has been perfected, it will constitute a veritable specific for endocarditis as well as for all other diseases of septico-pyemic origin.

Ross reports a case of ulcerative endocarditis in a girl, which terminated in an almost uninterrupted recovery after inoculation was undertaken with a vaccine prepared from a streptococcus obtained from her blood. This girl had had considerable pyrexia extending over five weeks and had received sixteen injections of antistreptococcus serum with no good effect.

EXCISION OF THE LACHRYMAL SAC AS A RADICAL CURE FOR CHRONIC INFLAMMATORY PROCESSES THEREOF.*

By Llewellyn Williamson, M. D., of St. Louis.

In urging more frequent excision of the lachrymal sac as a radical cure for chronic diseases of the tear drainage system, I realize that I am stepping into a field in ophthalmology on which a battle has raged fiercely for some time. There is, perhaps, no class of cases which gives so much trouble to both surgeon and patient as do these, whether they be a simple epiphora or a blennorrhea of the lachrymal sac; and there is no class of cases upon which opinions as to treatment are at so great a variance. The question in the minds of most oculists in regard to these cases seems to be "To probe or not to probe; whether it is better surgery to suffer the pains and inconvenience of long and frequent probing or by excising end them." My own opinion is strongly in favor of the latter course and I am sure not only a great deal of unnecessary time and discomfort could be saved, but also a great deal of actual harm be avoided, were excision more frequently substituted for probing.

In order to justify my argument in this direction, it is necessary to look a little into the pathology of these cases. The tears, as you know, are secreted by the lachrymal gland which lies in a shallow pit in the roof of the orbit under cover of the external angular process, with an accessory portion passing down under the conjunctiva into the fornix. Normally this gland secretes only enough tears to keep the eye moistened and any excess is evaporated by the air. Upon excitation of the gland, however, either psychical or reflex, the tears are secreted in much larger quantities and are carried off through the lachrymal drainage apparatus, when this is in perfect working order. If the latter is defective, or the secretion very excessive, the tears run over the eye lids upon the cheek. But tearing from excessive secretion is usually transient in character and due to very obvious causes, such as emotional states, irritation from winds, foreign bodies, etc.; although, where drainage is interfered with, there is also an excess of secretion which is dependent upon stimulation of the terminal branches of the fifth nerve.

The cases which usually consult the medical man are those chronic ones due to interference with the drainage system. The patient comes to his family physician or oculist, complaining, perhaps, of his eye watering, the tears collecting in undue quantities and running over the cheek. As a result of this watering, if long continued, there may be a

*Read by title at the Fifty-first Annual Meeting, Springfield, May, 1908.

chronic inflammation of the conjunctiva and of the lid margins, or, perhaps, he may complain of a regurgitation of mucous into the corner of the eye, or there may be even an acute inflammation or abscess in the lachrymal sac. All these troubles are but various stages of the same disease and have their underlying cause in an interference with the proper drainage of the eye.

The lachrymal drainage system consists of the lachrymal sac or reservoir lying in a groove in the lachrymal bone on the inner side of the orbit; the nasal duct connecting the lachrymal sac with the lower nasal fossa, its exit being below the inferior turbinate bone; the canaliculi, two narrow canals leading from the lachrymal sac to the margin of the lids, and the puncta, or the opening of the canaliculi upon the lid margins, about six millimetres from the internal canthus. The normal passage of the tears along this drainage system is accomplished partly by capillarity and partly by a pumping mechanism due to the combined action of the orbicularis muscle and the lachrymal sac. This pumping action is brought about in the following manner: The act of winking causes a contraction of the orbicularis muscle. This orbicularis muscle is intimately attached to the internal palpebral ligament, which ligament is in turn intimately attached to the anterior wall of the lachrymal sac. The contraction, therefore, of the orbicularis causes a pull on the anterior wall of the sac, thus causing the sac to dilate and suck in the tears through the puncta. The elastic tissue normally present in the walls of the sac, upon release of tension from the orbicularis, contracts and in turn expels the tears through the nasal duct into the nose. It is well to remember this mechanism for it has an important bearing on the treatment of certain cases to be referred to later.

I am not an advocate of excision of the lachrymal sac in all cases, but merely wish to urge its manifest advantages in properly selected cases. It is obvious that interference with drainage may result from various causes and occur at any place along the drainage tract, and before excision is considered, therefore, a thorough examination of the entire tract should be made in an effort to locate the seat of the interference. This interference may be due to congenital abnormalities such as absence of canaliculi, occlusion of puncta, etc., to a malposition of puncta due to eversion of lids following injury or disease; to a lack of tone in the walls of the lachrymal sac; to fibrous or bony constrictions in the nasal duct, or finally to an hypertrophic condition of the mucous membrane with which the duct is lined, or to obstruction at the opening of the duct into the nose. If the constriction is in the puncta these may be gently dilated with a conical dilator, or in the opinion of many men, it is advantageous to split up the canaliculi. Personally, I object to this procedure if it can be avoided as the altered character of the canal after splitting interferes materially with the mechanism of drainage. The puncta, because of their position in apposition to the globe, assist the drainage of tears by capillarity and the canaliculi, being sur-

rounded by fibres from Horner's muscle, which contract in winking, assist in forcing the tears into the sac. This double action is lost when the canaliculi are split.

A thorough examination of the opening of the nasal duct into the nasal fossa should be made. In many instances, the mucous membrane forms here a valve-like opening, which when inflamed, entirely chokes the exit. Malformations may have to be dealt with surgically and if there is an hypertrophic rhinitis, this should receive treatment by means of alkaline sprays, etc., usual in such cases. As a rule, most cases of lachrymal obstruction begin in disease of the nose. The mucous membrane lining the duct, sac and canaliculi being continuous with that lining the nasal fossa, inflammation of the latter is very prone to cause inflammation of the former. It is rare, indeed, that an inflammation of the conjunctiva causes an inflammation of the lachrymal sac, but the contrary is quite the rule. The walls of the nasal duct consist of a thick plexus of veins, covered with mucous membrane, which when inflamed, becomes quickly engorged so as to block the channel. This engorgement, as I have said, is usually dependent on disease of the nose, and should be treated as is an hypertrophic rhinitis, by means of flushing with mildly astringent or alkaline solutions. With a lachrymal syringe inserted into either the upper or lower punctum, an effort is made to inject gently a solution which will gradually find its way through the duct. Very often at the first attempt, this is impossible and undue force should not be used for fear of rupturing the walls of the sac and causing extravasation of the fluid into the tissues, an accident which has occurred more than once. If it is found impossible at the first attempt to force the fluid through the entire duct, an effort should be made on succeeding days, and it is usually found that after two or three attempts, the mucous membrane contracts and the fluid finds its way to the normal outlet. A conscientious, careful repetition daily of this syringing will nearly always effect a cure in these cases when they are taken in hand before any more radical treatment has been instituted.

It is unfortunate that in just such cases, many surgeons resort to the use of probes. What is the result of probing in such cases? The lachrymal canal, surrounded as it is by bone, normally directed downward and backward, varies greatly in different persons. Besides this, the engorged membrane completely fills the canal, bringing the walls in apposition. The passage, then, of a probe through this canal, with its thickened and tender mucous membrane is no easy matter and is, in nearly all cases, attended by an abrasion of the epithelium, if not a tearing of the mucous membrane itself. Repair of this tear, like repairs everywhere else in the body is accomplished by the formation of fibrous tissue which, at first soft and yielding, soon becomes, as contraction continues, hard and resistant, so that the constriction formed by swollen mucous membrane is changed into a constriction formed by rigid bands of fibrous tissue. When such a condition has occurred, of course

syringing is no longer of any use and probing or some other procedure is a necessity.

It is true that when this condition exists, probing may establish and maintain the patency of the duct, but to do this requires a careful and thorough treatment for months, and in many cases, a more or less frequent probing is necessary as long as the patient lives. Unfortunately the lining of the nasal duct is endowed not only with tender mucous membrane and easily inflamed veins, but also with numerous nerve filaments so that probing is a very painful procedure. The result of this is that patients object strenuously to it and as soon as a certain amount of improvement is noted, they usually stop treatment till the case has relapsed, the regurgitation and tearing becomes again unbearable and they are forced to return for another course of probing till benefit, and not a cure, is again attained. As Herbert Parsons aptly puts it: "Thus the weary cycle goes on, epiphora and pus, alternating with probes and pain."

Where the patient can be kept constantly under the observation of the surgeon, it is perhaps permissable to treat these cases in this way, although even this I am loath to acknowledge. But where the patient cannot afford the months of time necessary or for various reasons cannot be kept constantly under observation, surely some other means of relief must be found, and this relief is best afforded, I believe, by excision of the sac. Not only is a constant regurgitation of pus and mucus from the lachrymal sac back into the conjunctiva a great annoyance to the patient, but it is a source of actual and grave danger to the eye itself. In this secretion pneumococci can always be found in great numbers and we all know that the pneumococcus is the cause of that very dangerous and serious disease, ulcus serpens. The slightest abrasion of the cornea in an eye suffering from dacryocystitis may develop rapidly into ulcus serpens, which in spite of the utmost efforts, may cause a total destruction of the cornea and loss of vision, so that even while the patient is undergoing treatment, he is carrying with him daily a bomb which may explode at any time, and for this reason, if for no other, tardiness in bringing about a cure is unwise.

Occlusion of the nasal duct, however brought about, causes a stasis of the tears in the lachrymal sac. These tears are at all times full of bacteria and when dammed up in the sac, these bacteria very soon excite an inflammation of the mucous lining, causing it to throw out an undue quantity of secretion. This abnormal amount of secretion, not finding exit through the usual channel, either regurgitates into the conjunctiva or causes a dilatation of the lachrymal sac, with gradual alteration of the character of its walls. As has been mentioned before, the walls of the sac contain a considerable amount of elastic tissue and this elastic tissue is necessary for the proper performance of its function. Stagnation of tears and dilatation resulting therefrom, causes changes in the walls with a loss of the elastic element, so that in many cases, although

the duct be perfectly patent, the epiphora continues because of the inability of the sac to perform its characteristic pumping action. It is obvious that no amount of probing, however skilfully done, can have any effect on this condition, and excision is the only procedure by which such a case can be benefited.

Although excision of the lachrymal sac is a very old operation, having been first performed by Platner in Leipsic in 1724, and later performed a number of times by Von Graefe, de Wecker and others, it has not seemed to meet with very much favor until recent years, and even today, in this country, is an operation which is not practiced nearly as much as it should be. Brilliant results attained by Voelcker in Kiel, Fuchs in Vienna, Haab in Zurich, Axenfeldt in Freiberg, Parsons and Morton in London, however, have done much to overcome the prejudice against this radical procedure and to demonstrate its extreme efficiency when properly done. The main objection to this operation heretofore seems to have been a fear that obliteration of the lachrymal drainage apparatus would cause a constant epiphora rather than a cure of this condition. This, however, is not so, as the experience of operators who have done much of this work shows. As has been mentioned earlier, the normal secretion of the lachrymal gland is only sufficient to lubricate the eye, without leaving any excess to be carried away. When tears collect in the eye, there is always an increased activity of the lachrymal gland, which increase is either psychical or due to reflex stimulation, the latter generally taking place in the terminal fibres of the fifth nerve, in the conjunctiva, lachrymal sac or nose. The presence then, of an inflamed lachrymal sac is a constant source of irritation to the lachrymal gland and causes a constant excess of secretion. Upon the removal of this inflamed sac, the cause of the excessive secretion is done away with and the gland returns to its normal condition, that is to say, only secreting enough tears to moisten the lids as they glide upon the eyeball. This, then is the reason why removal of the lachrymal sac cures the epiphora instead of increasing it. In a very few cases, it has been found that upon the cure of conjunctivitis due to the damming back of tears and secretion from the lachrymal sac, the epiphora continued, and in these cases, it has been necessary to excise a portion of the lachrymal gland also. The excision of the gland at the time of operation on the sac is strongly advocated by Holmes, of Cincinnati, who thinks it should be done in all cases. The majority of operators, however, differ with him, finding excision of the gland only rarely necessary and believe it to be better surgery to perform a secondary operation for its removal in those few cases where it seems to be required.

Much depends on the thoroughness of the operation, the technic of which is rather difficult. That of Fuchs and his assistants in the Augen Clinic in Vienna is the best I have ever seen. Fuchs has the advantage, however, of always performing the operation under local anesthesia, which, of course, causes very much less bleeding than when the face is

congested from a general anesthetic, and it is this bleeding which makes the operation difficult. American patients, however, are apparently more highly organized than the average German patient and I have found that they object strenuously to the operation under local anesthesia, and that in most instances, a general anesthetic is necessary. If a local anesthetic is preferred, it is induced as follows: A hypodermic syringe is filled with a mixed solution, 2% cocaine and 1-5000 adrenalin, and this solution is injected, 1-3 above the sac, 1-3 into the sac and 1-3 at its junction with the nasal duct. After waiting for a few minutes, it is possible in some cases to proceed with the operation without a great deal of pain.

For the operation itself, a slightly curved incision about 20 millimetres in length, beginning just above the internal palpebral ligament and 4 millimetres to the inner side of the canthus, is carried downward and outward through the skin and superficial facia, exposing the fibres of the orbicularis muscle. In making this incision, the knife should be directed towards the ear of the opposite side. The fibres of the orbicularis muscle are then dissected or pushed aside, exposing the deep facia which is continuous with the internal palpebral ligament. Tracing with the finger the lower border of the bony orbit upward along the ridge to the outer border of the lachrymal groove, the deep fascia and the palpebral ligament are cut through in this direction, exposing the sac lying just beneath. Ordinarily, the sac can be recognized by its dark blue color. The sac is then carefully dissected out, beginning on the nasal side, and dissecting around to the ocular side. The canaliculi are then cut through with scissors, the sac drawn up and cut off just below its junction to the nasal duct. A curette is then passed down into the nose and the lining membrane of the nasal duct is entirely destroyed. Great care should be taken to see that all the mucous membrane is removed, for if a small particle only remains, a continued suppuration will be the result. The skin is closed without drainage and the resulting scar is almost invisible.

The result from this operation when properly performed is universally good and in cases of atony of the sac, or fibrous constriction in the drainage tract, are such as can be attained in no other way. Not only does excision of the sac in these cases produce a radical cure, but it produces this cure rapidly and eliminates not only the pain, discomfort and loss of time due to continued probing but also removes the danger of an infected ulcer and consequent loss of sight. I am a strong advocate, therefore, of removal of the sac, first, in cases due to loss of tone of its walls; second, in cases due to constrictions in the nasal duct not of a temporary character; third, in cases of blennorrhea in which an operation is intended on the ball; fourth, in all cases which have resisted, for some time, proper conservative treatment.

Metropolitan Building.

FISSURE IN ANO.*

By W. H. Coffey, M. D., of Kansas City, Mo.

If I were going to take out an accident policy, "Fissure in Ano" is one of the things I would have it cover, because it is an accident that can happen to the youngest or the oldest of us, and because it leads so quickly to total invalidism. This condition has been designated by the various authors as tolerant and intolerant, tolerable and intolerable ulcers.

I feel that I have a right to differ somewhat with the text book writers on this trouble; we are taught by them that fissure in ano, aside from the intense and intolerable pain, is of very limited extent; an insignificant thing and easy of cure, under surgical treatment only. In fact, Ball says that he knows of no disease in which surgical treatment is attended with more certain success than in the affliction under consideration, but in my opinion it is oftentimes the beginning of a disease that is more serious and far more reaching in character than the authors teach us to believe. And again, it has been my experience that it is not always necessary to resort to surgery in order to effect a cure.

The victims of this malady in the last stages are marked individuals; they are pale and emaciated and look as if they might be in the last stage of tuberculosis; they are miserable to the last degree; yet in the first stage of this disease there is no pain. I am convinced that many a person has received a fissure in ano and recovered from the same without knowing it.

The denial of two things which are generally considered to be facts, is excuse enough, I hope, for this paper, but this denial would not be made if I was not sure of my ability to show that a fissure in ano is not painful, nor so easy of cure as the books would have us believe.

In order to elucidate this subject and make myself more clearly understood, I shall treat this disease under three heads, namely: 1st, the initiative, or stage of fissure; 2nd, stage of ulceration; 3rd, stage of abscess and fistulazation.

In the first instance, fissure, which is always idiopathic, we have a condition which is the result of trauma, something extraneous to the economy, such as the introducing roughly of the finger, or an instrument upon examination, the too rapid divulging of the sphincters, the passing of the child's head at birth or the forcing through the anal canal of hard fecal substances, causing a crack or fissure. What we now have is a break in the continuity of the mucous membrane only.

*Read by title in the Surgical Section, Fifty-first Annual Meeting, Springfield, May, 1908.

If so slight a wound was at any other part of the anatomy nature would quickly right herself; at this part of our anatomy she leaves the reparative process at a marked disadvantage owing to the contraction of the muscles, the passage of gases and the frequent motion of the bowels. A fissure is painless and has an essential tendency to heal and, as I have already said, does oftentimes heal without the individual being aware of any injury whatever; but unfortunately this does not always result. The cell proliferation makes a great effort at reparative process but being exposed to a variety of chemical changes and microorganisms, the cells, being young and low in resisting power, are oftentimes unable to make very great headway at the reparative process, especially if the fissure is extensive and the individual is in disfavor with nature. The repair being only partially completed at this time a movement of the bowels, an examination, or anything in fact that would interfere with nature's work at this particular time, will completely sweep away, like a cobweb, the whole structure of bridging the fissure, with more or less injury to the deeper tissues. The failure of the young cell proliferation, time after time, to seal the fissure in the initiative, leads us to the second stage of this trouble, that of ulceration.

This condition is inherent in the economy; it is always symptomatic and its essential tendency is to enlarge rather than to heal. If viewed with the anus closed it appears as a slit; if seen when the muscles are at rest, or if dissected out and placed on a flat surface, it is of an oval or irregular shape with a large base.

The inflammatory exudates with the secretions, keep the injured cells exposed to chemical compounds, and soon cause degeneration. It is now that the sensory nerve filaments are exposed by the ulceration and receive impressions which are conveyed to that portion of the spinal cord from which the lumbar, the ilio-lumbar, sciatic and pudic nerves spring. We get that long train of symptoms of pain in the back and down the legs, in the genito-urinary organs, etc. And in the same way irritation of the sensory nerves supplying the external sphincter muscles causes a clonic spasm of that muscle. Constipation is a constant symptom of the disease at this stage for the obvious reason that pain is a very remarkable symptom. This intense pain is a blessing in disguise as it oftentimes forces the individual to seek relief before the disease progresses to the third and last stage.

If an ulcer remains in the anus a sufficient length of time to become somewhat tolerated, the injured tissues become infected with pyogenic bacteria, the lower fibers of the external sphincter acting as a barrier to the escape of pus which is dammed back between the external and internal spinchter muscles into the fibers of the levator ani, from which it has a ready passage through the lymphatics, up the bowel and into the superior pelvi-rectal space of Richet.

Then the gravest condition of the disease will soon present itself in form of an abscess resulting in fistula or fistulæ. This condition is oftentimes overlooked until the patient's health is entirely undermined.

Treatment. Unfortunately we seldom see the cases until they have passed into the second stage. If we could see and give them some timely advice in the use of medications to keep the bowel movement soft, instructing the patient to wash the parts after each bowel movement; and after drying with a soft cloth, use some antiseptic powder or some one of the silver balls, thereby preventing any further trouble. Yet the thing we should impress upon our people is cleanliness. You who make frequent examinations of these parts know of what I speak. Every person, sick or well, should have at hand water and a soft cloth and clean himself after each defecation instead of using the detergents now in general use, which in many cases only spread the filth and add to the danger of disease. The third stage of this disease is entirely surgical and that is so well known I need not speak of that here.

224 Bryant Building.

THE PROSTATE AS A FACTOR IN NERVOUS DISEASE.*

By Joseph L. Boehm, M. D., of St. Louis, Mo.

The prostate is to man what the uterus is to woman, in the sense that both organs have a specific function in the genital life of the sexes.

The prostate is a *sine qua non* in man's potency to reproduce. Anatomically the intricate network of blood vessels and nerves surrounding and supplying the uterus and prostate, bear some points of very close similarity.

A diseased uterus commonly produces some functional or organic lesion of the nervous system. This fact has been recognized since the early days of neurology and gynecology. Not many years back it was a common practice to make a snap diagnosis of hysteria in many neurotic females, without any endeavor being made to locate the exact seat of the trouble, whether intra- or extrapelvic.

To-day, however, neuroses in the female are treated scientifically by establishing the absence or presence of uterine or pelvic disease.

By analogy in considering neurosis of the male sex, I believe that very commonly the male pelvis is not thought of, and it is not a common practice to establish the presence or absence of an intrapelvic lesion. The principle of determining if male pus tubes, pelvic adhesions or organic lesions of the prostate or rectum exist should be established.

In considering the male pelvis, we can readily conclude that the prostate is the organ of paramount importance and when diseased has a prolific influence on the nervous system because of its complex and intimate relationship with both the sympathetic and spinal systems.

Byron Robinson has made a careful and extensive investigation on the anatomy of the pelvis. He describes a constant structure, the pelvic brain, formed by the union of the visceral branches of the sacral plexus with the hypogastric. He says: "The function of this pelvic brain is to rule the physiology of the tractus genitalis, urinarius and intestinalis. The pelvic brain is a nervous center, *i. e.*, it receives, reorganizes and limits nerve force."

In order to fully appreciate the relation and influence of the prostate on the nervous system, we must study its anatomy. As a rule very little attention is given to the prostate in the dissecting room; the average student is fortunate if he acquires a superficial knowledge of its anatomy and hears an occasional reference to this gland.

Hodgson, of London, in 1856, described the gland as follows: "The muscle structure from the mucous membrane of the urethra to the cap-

*Read at meeting of the Tri-State Medical Society, Ottumwa, Iowa, September 9, 1908.

sule of the prostate may be considered as a general muscle coat of the urethra interspersed with glandular tissue." Home, in 1806, announced a third lobe, which we consider as pathological. Reginald Harrison (*Lancet,* 1886), asserted that the prostate is largely a muscular organ whose chief function is support of the bladder. He explains incontinence of urine as being caused by a lack of development of this gland.

George Walker (*Johns Hopkins Hospital Bulletin,* 1900, Vol. 2); after thoroughly investigating prostatic anatomy by dissections on mammalians, arrives at conclusions at variance with previous investigators. He finds that the prostatic muscle exists as a definitely distinct muscle from the bladder. The whole muscular structure is arranged primarily to compress the prostate and not to act as a vesical sphincter, as had been supposed by Harrison. He further claims that the prostate belongs to the generative and not to the urinary organs, as its epithelium is an outgrowth of the Wolffian ducts, as are the testes, vas deferens and seminal vesicles. Also the prostatic muscle is derived from the muscular coat of the urethra and adenoid tissue is scattered at irregular intervals throughout the gland. The glandular substance forms about five-sixths of the organ. Fuerbringer agrees with Walker that the prostate is as important as the spermatozoids, for the fluid which it furnishes as a vehicle for the semen allows their motility, and a diseased prostate may cause sterility because an abnormal prostatic secretion may alter the vibratile movements of the spermatozoids.

Freyer, of London (Surgical Diseases of Urinary Organs, 1908), says: "The prostate is in reality composed of twin organs of apparently a purely sexual function, which in some of the lower animals remain distinct and separate throughout life, as they exist in the human male during the first four months of foetal existence."

The physiology of the prostate is all important, but judging from the very little attention paid this subject in text books on urology and physiology, one would imagine that this gland is of no more importance than a small lymphatic node. To the experienced urologist, however, its physiology is a subject of serious attention and study. A very able presentation of research in this line is reported by Heinrich Stern, (*American Journal Medical Science,* 1903, Vol. 126), from which the following is summarized: "The normal juice of the prostate gland even when procured under the utmost precaution is never entirely free from substances secreted by the adjacent glands. A specific ferment causing coagulation of the contents of the glandulæ seminalis was described by Cammus and Gley."

This coagulation is not produced by rennet, fibrin ferment or blood serum. The secretion of the prostate does not alter either blood or milk when mixed therewith.

Lecithin produces the milky appearance of prostatic fluid. I believe that prostatic lecithin is not a waste product; is it not possible that there

may be some internal secretions of this gland essential and beneficial in body metabolism?

Kraus maintains that spermatozoa cannot preserve their vitality in the uterine mucosa in the absence of prostatic secretion, but that in its presence they retain their physiological potency often longer than thirty-six hours.

We therefore realize that the physiology of the prostate is not as thoroughly and accurately understood as its anatomy. The inflamed prostate produces numerous reflex neuroses. The multitude of symptoms due to these reflexes occur not only through the motor and sensory tracts, but also through the vaso-motor system. Cerebral hyperemia, hyperesthesia of the eyes, coccodynia, coldness and numbness of the lower extremities, are directly dependent on the vaso-motor influence. Reflex pains along the obturator, ilio-inguinal and ilio-hypogastric and hemorrhoidal nerves are also some of the reflex conditions.

We will now consider some of the diseases of this gland and trace the effect and influence of morbid conditions on the nervous system.

Syphilis of the Prostate. Syphilis of the prostate is well worthy of close observation. It is surprising how scant the literature is on this subject. From personal observation I can say that syphilitic prostatitis is a distinct entity. Syphilitic involvement of the prostate does not necessarily in all cases mean a previous venereal or inflammatory infection of the gland. In some of the observations, it was difficult for me to say whether the systemic syphilitic infection or the involved prostate caused many of the neurotic symptoms in some of these cases. In two cases there was excruciating pain in the lumbar region, the patients gladly remaining in bed. In all these syphilitic cases, the periprostatic tissues were so edematous that the seminal vesicles could not be outlined by palpation. It is well to remember in this condition that in prescribing the iodides, that free iodine is liberated in the urine and in addition to the inflamed prostatic mucosa of the urethra is added the irritating influences of an iodized urine.

In referring to inflammatory conditions we will consider that the subacute and chronic inflammatory conditions are of more importance in causing reflex neuroses than the acute conditions.

Some authorities claim the seat of sexual sensibility is the vera montanum, on the floor of the prostatic urethra. It has been my practice to examine with the urethroscope all cases of sexual perverts, masturbators and old roues, and almost always in these individuals have I found a hypertrophied vera montanum, bleeding very readily on the touch of a cotton applicator through the urethroscope.

More generally, however, we find the seat of sexual sensibility described as belonging to the prostate without any particular part being designated. I agree with Lydston, that "the sexual function of the prostate is rather complex comprising several elements, viz: a special sensory, secretory and mechanical."

Chronic diffuse prostatitis, interstitial and follicular, is a very common condition, commonly occurring as a sequel from a simple or a gonorrheal posterior urethritis that is uncured. Chronic prostatitis may result from the acute or it may originate as a primary disease. Prostatorrhea is a very common symptom with a frequent tickling, creeping sensation of the urethra, frequency of urination, hypersensitiveness on passing a urethral instrument into the deep urethra, and an occasional ardor urinæ. Undefined pains in the thighs and sacrum, premature seminal ejaculation in coitus, excessive nocturnal emissions, painful or prolonged erections bordering on satyriasis, when sexually excited or even caused by peripheral irritation of the penis by the clothing; these are some of the very common symptoms.

Kreissl (*Urogenital Therapeutics,* 1900), says: "The long train of local and reflex disturbances and the functional derangements terminating in sexual neurasthenia require our full attention." He refers to those cases resulting from sexual excesses, etc., as the "aseptic type" of prostatitis. Numerous cases of prostatic neuroses, following chronic prostatitis occur in which there has never been a history of any preceding venereal disease.

Kraft-Ebing says: "The frequency of general neuroses and psychoses arising in sexual, functional or organic disturbances is easy to understand. Hyperesthesia, indicative of a cerebral neurosis may be superinduced by prostatic disease, producing increased sexual desire or satyriasis." This is intense and at times there may be maniacal sexual excitation.

In acute and subacute deep urethritis, we commonly find a patient complaining of increased and prolonged sexual excitability. This prolonged and continued congestion of the prostatic urethra is a vital factor in considering the etiology of chronic prostatitis.

White says: "Chronic prostatitis is a more frequent occurrence than the acute form of the disease, but is less understood. A prostate gland the subject of chronic inflammation may be found larger or even smaller than normal size."

Belfield says: "No author that I have consulted, notes the fact that chronic inflammation affecting the prostate is commonly not limited to that organ, but invades a part or the whole of the genital tube proper and naturally invades the connective tissue enclosing the tube."

Fuller says: "To differentiate a sharp border line between a chronic prostatitis and a chronic seminal vesiculitis is not as simple as it may appear. A characteristic symptom is the profound mental depression exhibited by the patient."

According to Chetwood, "Chronic prostatitis is liable to be attended by various reflex phenomena, psychical disturbances, sexual debility and neurasthenia."

Relation of the Prostate to the Spinal Cord. What is the relation of the prostate to the spinal cord? It has a direct relation and influence

as follows: The center of erection and ejaculation is in the lumbar region of the cord; the cerebral genital center, which is largely inhibitory, presides over the prostate, genitally speaking.

Some of the nerve fibres passing between the spinal cord and the genital center of cerebrum transmit exciting and others inhibitory influences. The prostate has erectile as well as muscular and glandular tissue and participates in the venous as well as the arterial engorgement in sexual excitement. A tendency to frequent or constant erection and impending orgasm, as is found in many of the degrees of prostatitis, has a devitalizing influence on the spinal cord. Ultzman and Winternitz both recognized this influence on the cord, the one experimented with electrotherapeutics and the other with hydrotherapy in spinal derangements following this prostatic condition.

Friend (*Journal American Med. Assn.,* 1904), describes a prostatic crisis as a symptom of incipient tabes dorsalis. He claims pain is particularly localized in the perineum in periodic attacks of three to five minutes. Asthenia of the spinal cord, in its different parts, occurs secondarily to prostatic disease.

Asthenia of the dorsal cord is indicated by pain in the occipital region, the nape of the neck and shoulders. Pains in the lumbar region and over the kidneys, are due to lumbar asthenia. Cerebral exhaustion through the influence of the genital center, is indicated by asthenopia. Pain in the cervical and occipital regions when complained of seldom leads the physician to think of prostatic disease as the primary cause. The following case illustrated this condition:

Mr. L., age 27, traveling salesman, contemplated matrimony, was much worried with paroxysmal pains in the cervical and occipital regions; a heavy dull feeling in the nape of the neck and a sensation of weight in the center of the perineum. Patient stated that he thought there was some relation between these pains, being very observant and intelligent.

Urethra was examined with the urethroscope and the prostate palpated per rectum, showed a marked congestion of the prostatic urethra, a hypersensitiveness of the prostate, which was firm, hard and somewhat large. No gonorrheal history but a frank confession of prolonged sexual excitation with only temperate amount of intercourse. A three months treatment of local applications to the urethra and rectal treatment of the prostate, completely relieved his pains in neck and occiput and he discontinued wearing his glasses that had been prescribed by an oculist for his so-called weak eyes.

Neuralgia of the Prostate. Neuralgia of the prostate is very often caused by a non-venereal inflammatory hyperesthesia of the prostatic urethra. Keyes makes a distinction between the two classes of cases, one pure neuroses, the other cases of sexual excess in the young.

This is one of the most distressing and harassing of all prostatic diseases to the patient and our efforts at rapid and effective treatment are often very slowly responded to, much to the chagrin and disgust of our

patients. It may be reflex to some disease of the testes or epididymi, and *vice versa;* neuralgia of the testes and spermatic cord may be merely a reflex condition due to a chronic inflammation of the prostate. At present I have a case of this latter class under my observation, which is due to a chronic gonorrhœal prostatitis, in a dentist who has suffered so severely in the last three years that he now desires a prostatectomy with the hope of getting his aching testicles relieved.

I have a very interesting case of chronic prostatitis under observation, with a severe sacral pain reflexly for some months, who suddenly developed a dull pain over his upper pubic region, and symptoms suspicious of renal colic. An *x* ray picture shows a small calculus in the lower end of the right ureter. In this case undoubtedly his prostatic disease long preceded the stone in the ureter.

Very commonly we hear of sciatica, sacro-iliac disease and diseases of the psoas muscles, being diagnosed because of some vague pain as a symptom in the upper or middle of thigh, when a thorough and well directed examination of the prostate, and the proper treatment may bring a speedy relief to the patient.

A patient, 22 years of age, left the Insane Asylum one year ago, where he was incarcerated for acute mania. He admits excessive masturbation for months, and presents all the appearances of dementia, while he is very rational at times. He said he often told the physicians of pains in his sacrum and hips, and he was dismissed without any attention for same. I examined his prostate and found same as large as a good sized lemon and abnormally sensitive to palpation. Urethra extremely hypersensitive. Prostatic treatments have made a different individual of him, and done much to quiet a very neurotic patient.

Prostatic gout is a term coined by Harrison and is not generally referred to as a distinct entity. In this condition we have a typical picture of systemic gout with the corresponding involvement of the urinary tract, and the prostate involved merely as a coincidence.

Sexual Neurasthenia. Sexual neurasthenia is a vague, misunderstood term, well worthy of consideration and is so commonly used to cover much professional ignorance and omission. It is a secondary condition only too common as a sequel of a diseased prostate as a primary factor. Abrams in a recent monograph, says: "Nervousness while expressive of an enfeebled nervous system, is an expression evoked by some irritant, resident somewhere in the system otherwise than the nervous system." If this definition be correct then we may assert that sexual neurasthenia is dependant on some irritant in the genito-urinary tract, not in the nervous apparatus.

This irritant is only too commonly a chronically diseased prostate. Bears, a pioneer neurologist claims, "next to the stomach the prostatic urethra is the most important center of reflex irritation in the body. There is every reason physiologically and anatomically why this should be so and a close study of the symptoms of nervous debility proves it to be

so. A morbid state of the prostate is both an effect and a cause of nervous exhaustion; for it is impossible to have an irritable prostate and yet be in good health in other respects."

Sexual neurasthenia is an impoverishment of nerve force and without doubt it is proven that prostatic disease produces it. In this condition we may find a prolonged phosphaturia and oxaluria, which does not as a rule respond to a change in dietary or mineral acids.

Therefore in a neurosis, where there exists a continued phosphaturia or oxaluria, and a condition of irritation in the genital tract, after eliminating the possibility of calculus, we must remember the prostate as being the factor to receive attention.

Psychoses from chronic disease of the male genital organs is only too frequent. Lydston says: "Care must be taken to carefully discriminate between cases that are psychoses *ab initio* and those in which the psychic element is simply an ingraft upon the symptoms produced by the organic disturbances."

The following illustrates a case of psychosis from prostatic disease in which there was no evidence of organic nervous trouble.

Mr. X., age 35 years, merchant, married for two years. He suddenly became worried over his inability to perfectly fulfill his marital relations. He complained of physical weakness and inability to concentrate his mind on business matters for any length of time, with occasional cardiac pains and palpitation, black spots before his eyes, occasional vertigo while walking on the street. While at work at his desk at intervals of two months he had attacks of syncope. His case was diagnosed by an ophthalmologist, who used the ophthalmoscope, as anemia of the brain; by an able internist as an incipient myocarditis, who sent him to a sanitarium for several weeks to take a course of mineral baths, etc.

Finding that hydrotherapy failed to relieve his spinal weakness, he consulted another clinician, who told him he had enteroptosis with autointoxication and was advised to wear an abdominal belt and was given intestinal antiseptics.

He finally came under my observation, and as I had known this patient very well socially for several years, I knew that his prematrimonial habits were those of sexual excesses and dissipation. I attributed his spinal asthenia to his past habits and life, and thought the cerebral exhaustion, enteric and cardiac symptoms were merely secondary conditions. The patient agreed that his past sexual career had some bearing on his present condition, causing his apparent impotence, etc. Urethroscopic examination of his prostatic urethra showed an edematous vera montanum, and merely swabbing his urethra with a cotton applicator set up a hemorrhage, showing a high degree of congestion. Prostate was extremely hypersensitive, so that on rectal palpation patient fainted in the office. Prostate was soft and large, causing, as I believed, to a great degree, his constipation.

Local applications and treatment made rapid improvement so that the patient's confidence in the diagnosis was obtained. Chronic prostatitis existed in this case, with an absolute denial of any previous gonorrhea. According to his statement, he consulted six different clinicians and not once was any hint made of any possible prostatic involvement. He had been constantly under observation for the past three years and he has successfully impregnated his wife and is now living a happy and comfortable life.

From records of my clinics, I can absolutely prove that very few of the average negroes allow themselves to get cured of gonorrhea, seldom if ever returning when the urethral discharge diminishes and as is so common when a posterior infection sets in, the urethral discharge temporarily ceases, they have often said they are well. Therefore they go on indefinitely with a posterior gonorrhea and as we presume only too frequently the prostate gland becomes involved. Many of these patients have told me in the clinic that they have had some kind of a urethral discharge for years. In a recent magazine article, entitled, "The Future of the Southern Negro," the writer, a physician, stated that the large percentage of chronic venereal diseases amongst them is appalling. It is almost second nature for the roustabout or plantation hand to have his so-called "running-rings," the vulgar name for a urethral discharge. In his hip pocket only too commonly does he carry his bottle of harlem oil, or a mixture of copaiba and nitre, which is the prophylactic and specific he prescribes for himself.

Such a negro, low in the scale of intellectual development with a diseased prostate and prostatic urethra, is in a condition of constant erotic excitation. At times he is so excited that he borders on a state of orgasm, like a vulture seizing its prey on the field, he assaults some innocent woman he passes on the highways.

There is a popular fallacy amongst some ignorant persons, that to cure a clap, intercourse should be had with a virgin. This also may have some influence on his ignorant superstitious mind. How many white men of intelligence boast of their morning drop and urethral tears of years standing.

May I assert without fear of contradiction that some forms of sexual perversion may a priori be due not to a psychosis but to an originally diseased prostatic urethra, affecting the nervous system.

Irritable prostate is frequently referred to. It is merely a symptom of some organic prostatic disease possibly an old gonorrheal condition, causing all varieties of reflex neuroses. We have shown the relation of the prostate to the sympathetic nervous system. Therefore it is proper to believe that erotic delirium is superinduced by some chronic inflammation of the prostate or exudate in its sheath.

"Do something for me, or I will attack a woman on the streets," is the statement I have heard from these sufferers, who have often been

men of culture and standing. The poor negro, however, does not realize that his excitation is due to some previous venereal infection. In 1899, at the St. Louis City Hospital, I made a careful study of the prostates of negroes and found a large number of diseased conditions, where the patients never placed any relation to some previous urethral infection. Tuberculous involvement of prostate and epididymi was very common.

In a medico-legal contest on a criminal pervert is it not logical to examine his genital organs and the condition intrapelvically, in ascertaining his mental and civil responsibility? Is not chronic disease of the prostate as much of a specific condition as thickening and inflammation of the covering membranes of the cerebrum for which many a criminal is sent to an asylum?

Medico-Legal Status of Criminal Perversion. Psychiatry should take cognizance of the possibilities of this condition; a staff of consulting neurologists may examine a criminal as to his mens sans—does a staff of urologists often examine the genital organs of the accused by order of the court?

A man who commits rape is probably as insane as one who has a "brain-storm" or "dementia Americana" and is entitled to as careful an examination of his genitalia as these individuals are to the defense by noted alienists who are paid princely sums for their diagnosis of fabricated mental diseases, to which some have so credulously and willingly testified.

Recently in St. Louis, a pervert known as "Jack the Stabber," was convicted on the testimony of examining neurologists. The testimony does not show that any examination was made of his pelvic genitals to show the presence or absence of any organic sexual disorders; however, more stress is laid as a rule on hereditary taints and predisposition than on the *status presens* of the criminal. It is my firm conviction that it is only just to the accused to make such an examination of his genito-urinary system.

In Summarizing, we Conclude the Following: First: The prostate and its appendages when diseased have a special influence on the nervous system, in close similarity to the nervous sequelæ of the diseased female pelvis.

Second: The prostate and seminal vesicles are to the neurotic male what the uterus and tubes are to the female and must always be carefully examined in neuroses.

Third: Apparently simple disturbances of the prostate may cause serious reflex neurotic conditions because of the complexity of the nervous mechanism surrounding and supplying it.

Fourth: The question of an internal physiological section and the possibility of the lecithin and organic constituents of prostatic secretion serving as a nutritive factor to nerve metabolism, has not as yet been scientifically determined.

Fifth: Spinal asthenia and cerebral exhaustion are very common, often ascribed to overwork at the office or in literary pursuits, but not always recognized as dependent on a diseased prostate.

Sixth: In cases of sexual crimes and criminal perversion, an intra- and extrapelvic examination of the genitalia of the accused should be made by expert urologists at the same time that the expert neurologists examine the mentality of the accused.

Seventh: Jurists should recognize the mental condition of the fiend or pervert, who commits sexual crimes as not always due to a hereditary taint, but probably as commonly the result of some previous urethral disease, uncured at the time. From this chronic diseased condition sexual mania results.

Eighth: There is a medical aspect to the recent lynching and riots because the fiends responsible for same are diseased and not human monstrosities. Temporary sexual insanity is a reality as much as a deranged mentality caused by typhoid fever or some condition of hyperpyrexia.

THE PREPARATORY AND AFTER-TREATMENT OF SURGICAL CASES.*

By J. Nelson Barger, M. D., Albany, Mo.

The experience of ten years of general practice together with manifold observations, forces me to the conviction, that not enough time is usually given to the preparation of the patient for operation. This does not apply to emergency cases which we are compelled to accept and treat without preparation.

But the fact is, that many cases come to us in the state of physical debility, whose prospects of recovery could be greatly improved by careful preparation before operation.

Our duty begins and ends with the physical disabilities for which relief is sought, and I am convinced that the death rate may be reduced by a thorough systematic upbuilding of the body tissues before operations and the proper after treatment, till the functions are made normal as nearly as possible.

If this degree of improvement can be so easily gained, why not, when circumstances will permit, take more time for the preparation of the patient, and especially the after treatment, which is ofttimes as important as the operation itself.

The many cases that come to the surgeon for operation have autoinfection and the surgeon will wonder why his patient does not recover from the effects of the operation more rapidly; this, in many cases, is due to autoinfection. This autoinfection may come from the gastrointestinal tract, kidney, liver, or by poor elimination from the skin, demonstrating the necessity of a complete elimination before operation.

It is not always possible, and practically rarely so, in emergency cases to adopt the precaution, but extra attention should be paid these cases after the emergency is past—namely as complete elimination as possible. For present purposes, patients may be divided into two classes: those who have sustained accidents or sudden surgical diseases where no time is afforded for preparation, and those who have chronic conditions and are subject to surgical measures which are, however, sometimes made abrupt by sudden decision. In the former case, the surgeon is compelled to work hastily; in the latter, time for preparation should always be afforded. Experience teaches us that a few days, sometimes even a week, may be well spent in preparing a patient for operation. Preexisting diseases have a great deal to do with the results of operations,

*Read by title in the Surgical Section, Fifty-first Annual Meeting, Springfield, May, 1908.

as they may have left some sequelæ that could be corrected by the surgeon before operation. If some organ in the human anatomy is not functionating properly, due to pre-existing diseases, the surgeon should correct it, if time will permit.

Foresight will often dictate the preparation of some part of the body not directly involved in the field of injury; for example, in the case of gun shot or stab wounds of the abdomen, the back should be scrubbed and cleansed and the patient laid upon sterilized material for posterior drainage if required. A deranged digestive system is one of the greatest difficulties the surgeon has to contend with; a well regulated diet should be selected for these cases before operation. The intestines should be made to perform their work by the mildest measures that may prove effective,—mercurials are agents of great value as they not only stimulate secretions but are antiseptic in their action.

Sodium phosphate is useful when something stronger is not necessary. Many patients suffer from intestinal torpor, especially of the colon. In such cases a high colon wash will give gratifying results. Before leaving the digestive tract let me again impress on your minds the great necessity of cleaning out, clearing up and making the digestive tract as aseptic as possible. A careful study of the urine should be made before operation, both quantitative and qualitative; it is necessary to know the solids that are being excreted, renal insufficiency being one of the most dangerous difficulties the surgeon has to contend with. This condition should be thoroughly investigated, as it may be of some help as to the choice of anesthetic.

Choice of Anesthetic: This may depend upon the individuality of the case. Where there is a tendency to renal insufficiency due to organic changes in the kidneys, ether would be the safest anesthetic, but as a general anesthetic suitable to the majority of cases, hyoscine-morphine-cactin, with the inhalation of a small quantity of chloroform, will usually prepare the patient for operation. With this anesthetic, the patient gets the physiological rest without much nausea and vomiting.

After-Treatment. The care of patients after operations is a factor in a surgeon's success and calls for discrimination and judgment.

Extreme restlessness is undesirable from every point of view. When coming on early it is generally due to one or two causes: First, insufficient oxygenation, or nervous temperament of the patient. It also frequently accompanies shock, and constitutes one of its most disturbing features. It may be combated by a subcutaneous dose of morphine or heroin, but my preference would be hyoscine-morphine-cactin. Restlessness after operations is not always a symptom of pain. Physiological rest of the operated part is necessary for the process of prompt repair after abdominal operations, especially when restlessness and vomiting are combined; much harm may be done if the patient cannot keep the parts quiet. When an operation has been performed either in the home or hospital, a battle at once sets up between the recuperative powers of

nature on one hand, and the pathology of the wound on the other. If we are to assist nature to the utmost in this struggle, these things are essential: First, the wound must be dressed in such a manner as will prevent the invasion of bacteria. Second, if possible, we must prevent bacterial invasion of the body through other avenues. Third, we must secure, as nearly as possible, both physical and mental rest. It is in these things that the home outshines the hospital as the rays of an electric light exceeds the tallow dip. And I will say without fear of criticism, that in the case of an operation in a well prepared home, the patient recovers from the effects of the operation more rapidly. That the modern hospital has both a field of usefulness and furnishes clinical material to teach, train and produce the most skilled operators, is beyond question, but that it is not as safe for the patient as the home, under the hands of the same operator with the same subsequent nursing, is the province of this paper to demonstrate.

As quoted by Dr. Chambers of St. Louis: Let a hospital be kept ever so well and furnished with a corps of the most skilled and scientific attendants, it is the natural depot for disease germs in which patients are lodged, containing every pathogenic germ and giving them off with every exhalation of the breath, evacuation of the bowels, skin exfoliation and excrement, and elimination by kidneys, poisoning the air within the hospital; and were it not for the fact that the hospitals are constantly fumigated and great care taken to prevent interior contagion, every hospital in the land would be a veritable pest-house. This is verified by the medical, or rather hospital, history of our Civil War. Surgical patients taken to hospitals are almost invariably operated on before they become acquainted with their new surroundings. The result is they are wrought up, nervous or excited by every strain or unfamiliar sound after coming from under the anesthetic. They realize that the psychic influence of home has passed away, and they are in a struggle for existence. Their groans and moanings may and do ease their sufferings, as well as drown the medley of hospital sounds during the first twenty-four or forty-eight hours of their intense physical sufferings and shock. But, when exhausted nature demands rest and the severed nerves become painless, they are then disturbed by their strange surroundings. The home presents an entirely different condition.

There are three very important things to be considered by the surgeon after operation: First, secondary hemorrhage; second, shock; third, after-treatment of wound.

The danger of secondary hemorrhage pertains mostly to septic conditions. In an absolutely aseptic wound properly cared for, this is almost impossible, but as soon as germ activity begins lymph barriers are broken down, tissues softened, and weakened vascular walls may give way. Secondary hemorrhages may call for a ligation of a main trunk not previously attacked and in a majority of cases will demand reopening of the wound and further search for the bleeding point. The

signs of secondary hemorrhage will vary with a location of its source. Occurring on or near the surface it will usually stain the dressing; occurring deeply as in the pelvic or abdominal cavities, it will produce prompt symptoms of shock, that is, low blood pressure, the degree indicating the extent of blood loss. In these cases, unless the patient's condition contraindicates the measure, the wound should be opened under anesthesia and the source of the bleeding sought out and mastered.

Shock may be defined as a condition of general vital depression, or a state of general exhaustion coupled with a dilatation of the peripheral arterioles, and a loss of the normal blood pressure.

Symptoms: The symptoms of shock will depend upon its severity. In a well developed case of shock, the patient's sensibilities are lessened and his mental faculties held more or less in abeyance. The pulse will be quickened, feeble, thready, and perhaps irregular; the face and mucous membranes are paled, the eyes sunken and listless, the face, hands, and often the entire body are bedewed with a cold, clammy perspiration. Nausea and vomiting occur in many cases.

Diagnosis: Shock must be differentiated from fat embolism, from hemorrhage and from the effects of ether, or chloroform. It may, however, be associated with each or all of these. Fat embolism is more liable to be seen in operation of the osseous system, and it makes its appearance in thirty-six or forty-eight hours after the operation, shock coming on immediately after operation. Hemorrhage is a very frequent associated factor with shock and aggravates the latter condition, but the two may be, and often are, entirely separate.

Treatment of shock: Apply hot applications externally. In my experience with shock there is nothing that meets the condition and which sustains the nervous system and holds the ground gained so well as strychnine; nitroglycerine may be given in doses of one hundredth grain. Adrenalin, in the writer's experience, acts promptly in increasing the blood pressure. However in the treatment of shock there are conditions to be met beside the loss of blood pressure. One of these is the loss of muscular tone, and the other, the practical suspense of the mental faculties. It is probably true that anything which assists in restoring blood pressure will also re-establish muscular tone and restore the mental faculties. These conditions are met more perfectly in shock without hemorrhage by the use of strychnine, caffeine, nitroglycerine, whiskey, adrenalin and normal salt solution, than by any other remedies.

Treatment of wound: The object of wound treatment is to prevent anything from coming in contact with the wound surface which can convey infection and to limit the number and the virulence of bacteria whose entrance cannot be prevented. The general practitioner is ofttimes responsible for the infection of the wound after operation. The hands should be thoroughly scrubbed and made as aseptic as possible. If drainage has been used, the wound should be dressed at the end of

twenty-four or forty-eight hours and the gauze or tube removed. Repair will not be hastened by needless inspection; fever, pain, odor and saturation of dressings will indicate the necessity of examination. The important part of success in the healing of the wound is aseptic surgery before and after operation.

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GUMMA OF EXTERNAL NOSE. REPORT OF A CASE.*

By J. S. Wever, M. D., Kansas City, Mo.

February 17, 1908, Mrs. C. E. W., age 28, housewife, white, American.

Family history. Father and mother living and in good health, aged 70 and 68, respectively. Mother had two sisters die of tuberculosis. Patient has two brothers and one sister living and in good health and none dead.

Personal history. Married first husband secretly fourteen years ago when a mere school girl of 14. Discovered he had specific disease after having been married to him for seven years and after that had nothing more to do with him. Married second husband 14 months ago. In the intervening period she had a tonsillitis which hung on for two months and finally got well with local treatment. Second husband admits specific infection for which he took treatment and was told he was cured four or five years ago. (Two or three weeks after seeing patient, I treated her present husband for a deep ulcer of the pharyngeal wall behind the right posterior pillar, which yielded readily to specific treatment). Patient admits six miscarriages with her first husband and two with the second. She had one child go to term and that one died with meningitis at four months old.

The lesion began two months previous to examination, as a smooth, raised area on the ridge of the nose, without redness or pain. Later became red and finally yellowish white in the center. Had crusts in the right nostril for one year previous to examination, but none in the left. Left nostril was stopped up and she had lost the sense of smell completely.

At the time of examination the lesion externally was softened in the center and its diameter was about 1¼ inches with the center raised about 3-16 inch above the level of the nose. Four days after examination, under gas anesthesia, the tumor was opened and cleaned out. A fistulous opening ran diagonally downward over the right lateral cartilage, as is indicated by the match in the photograph. There were two smaller fistulæ but the cartilages were not involved except on the surface. Within the nose the swelling of the septum and the anterior ends of the turbinates was great and yielded but little to adrenalin, showing that it was an infiltration and not an edema. A piece of tissue from the right nostril and some of the pus from the external wound were submitted to a pathologist who said the pus contained ordinary pus germs but the excised piece had the appearance of tuberculosis. A few days

*Read at the meeting of the Northeast Kansas Medical Society, Atchison, Kans., October 8, 1908.

thereafter a dermatologist saw the case and agreed with me that the case had more of the indications of syphilis. On March 3, treatment was begun. March 6 and 7 the tuberculin eye test was tried twice with negative results. She has been on specific treatment ever since. The external lesion healed in about three weeks with gauze drainage. It did not communicate with the nostrils by any opening. When the swelling had abated internally the left middle turbinate was removed and the anterior wall of the sphenoid sinus broken out on account of suppuration. At the present time there is a scar externally about half an inch long, ad-

Gumma of Nose.

herent to the underlying cartilage, but not giving a saddle-back effect. The septum was not perforated. In view of the numerous miscarriages and a stubborn tonsillitis following her first marriage, and also the fact that she had been married to her second husband only fourteen months, it is highly improbable that he could have been any factor in the case except a rather odd coincidence.

J. B. Kyle[1] says the nose is a common site for gummata and they are late lesions usually occurring ten to twenty years after infection. I would call attention to the similarity between the photograph of this case and the illustration in Kyle's book, at page 326.

W. L. Ballenger[2] says tertiary lesions develop from 3 to 25 years after primary infection.

There was probably a specific involvement of the attic of the nose long before the gumma appeared.[3]

501 Bryant Building.

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WHAT MAJOR OPERATIONS SHOULD BE ATTEMPTED IN PRIVATE HOUSES.*

By Ola Putman, M. D., of Marceline, Mo.

You will notice by the title of this paper that we are asked to consider what major operations should be attempted in private houses, which gives us a greater degree of latitude than if it had read—what major operations could be successfully done.

Before enumerating the major operations that I think should be attempted in private houses, a few words concerning operations in private houses might not be out of the way. In the first place I want to state that I am in favor of operating in private houses. While the hospital has many advantages over most homes for the immediate operation, the home on the other hand has some advantages over the hospital. The greatest advantage is that the patient is where everything is familiar; he feels he will in no way be neglected; he has nothing to worry him about his family; he does not have to be transported a great distance by wagon or railroad; the expense is not nearly so great nor is there so likely to be infection in the average home as in the hospital when the usual steps are taken to secure asepsis.

The house should be prepared for the operation. The room, where the operation is to be done should be large enough to accommodate six persons, the tables and stands should have a good light, and in winter should be warn. The carpets should be taken up, floors scrubbed, the curtains and pictures removed and the walls wiped with a damp cloth. If there is time, it is sometimes advisable to disinfect the room with formalin the night before. If this is done the room must be aired and the fumes of the formalin neutralized with ammonia. A kitchen table is better than a dining table, if it is not possible to have a regular operating table, as the kitchen table is narrower and will be easier for the operator and assistants to work over. The question of assistants is most important. There should be enough competent assistants to enable the operator to do the operation without having to bother with the little details that take up valuable time and increase the risk of infection. There should be an anesthetist who understands giving ether and chloroform, and can keep the patient well under, so that the surgeon will not have to stop while the patient vomits and then wait until he goes under again. There should be a doctor to assist in the operation to hold retractors and hemostats, one to sponge and one to hand instruments and take care of solutions

*Read before Linn County Medical Society, August 11, 1908.

and sponges. There ought by all means to be a competent nurse to help prepare the patient and take care of him afterwards. If the surgeon will provide himself with these assistants, he makes the operation much easier for himself and for the patient.

The people must be shown that major operations can be done at home and that they can be done at less trouble and expense than by sending the patient away to the city. If the doctor in charge does not care to attempt the operation himself and cannot get proper help at home, it is much better to have a city surgeon come to the house and do the operation than to send the patient away; it makes the next operation easier to arrange.

Unfortunately, there exists among some members of the profession, a feeling of jealousy that prompts them to send cases away rather than allow the operation to be done by some fellow practitioner. Instead of this attitude, there should be a feeling of courtesy that would prompt a doctor who has an operation to be done to invite other doctors to see the operation whether it is a major operation or not. There is not so much surgery done, nor is the county so large but that there would be a number of doctors who would appreciate an invitation to see other surgeons operate. Another reason why there is no more surgery done is because too much dependence is put in medicines. This is reflection on the doctor in charge. Many times when a correct diagnosis is made in a case that calls for surgical interference, the doctor will continue to treat a pelvic abscess with quinine or a fibroid with ergot and trust that the abscess will rupture spontaneously so as to drain outside, or that the tumor will at least cease to grow. Many such cases terminate favorably for the doctor, but a better result could have been procured by gaining the patient's consent for an operation. Even in a desperate case where the chances are against the patient's recovery, it is better to give him the one chance contained in an operation. If a doctor will tell the patient and family the truth and explain that he is willing to give the patient his one chance, then if the patient dies, the doctor will know that he has done his duty, and the family will know that all was done that could have been. Nor will the doctor lose anything in the estimation of the family and friends. They will have more confidence in him than before.

In this paper no attempt will be made to describe the operations or say when they are indicated; any effort of that kind would draw the paper out to an indefinite length.

The major operations that can be attempted in private houses can be divided into two classes: First, the emergency cases that are the result of direct violence, *i. e.*, high amputations, trephining, gunshot wounds, etc. These will not be discussed as it is so clearly our duty to take care of such cases that argument is out of the question. There is another class of emergency cases that are not the result of direct violence, but call for quick judgment, and, more often, immediate opera-

tion. This class contains the greatest number of major operations that we are called upon to do in private houses. Among these, I will name:

1. Obstruction of bowels.
2. Operation for appendicitis during attack.
3. Operation for mastoid disease.
4. Cæsarian section.
5. Ectopic pregnancy.
6. Strangulated hernia.
7. Tracheotomy.

1. There is little to say concerning ileus, but if the classical symptoms of obstruction are present and repeated high injections of water, with the patient in the knee-chest position, fail to move the bowels, then the operation should be attempted at once. The high mortality rate following this operation is often due to postponing it until the patient is too weak and the adhesions are too firm to be broken.

2. In the operation for appendicitis during the attack, we should be guided by the severity of the attack, taking into consideration the number of preceding attacks. If it is the first or second attack and the symptoms point toward rupture of the appendix the operation should be done and it will be easier than when the rupture occurs in a case where there have been several attacks before. There will not be so many adhesions and they are not likely to be so firm. On the other hand, if the appendix ruptures, after a number of previous attacks, the operation could be more safely postponed. The adhesions would have walled off the pus from the abdominal cavity.

3. Mastoid disease often calls for prompt interference. It is a life saving operation and does not demand the strict aseptic surroundings of other major operations. It is merely opening an abscess and can be done just as well in a barn as in a hospital, for after reaching the pus, the field of operation will necessarily become infected.

4 and 5. Without raising the question of when Cæsarian section or operation for ectopic pregnancy is demanded, I will only state that both operations can be safely carried out in private houses and are probably done there more often than in the hospital.

6. Strangulated hernia demands an early operation to be successful and no time should be consumed in transporting the patient to a distant hospital. The patient should be prepared for operation at once, after reduction under chloroform has been tried.

7. Tracheotomy is the last named of the emergency operations that should be classed as a major operation. When indicated, it should be carried out as quickly as the consent of the parents can be gained.

THE DOCTOR IN POLITICS; OR HIS CIVIC RESPONSIBILITIES.*

By E. G. Beers, M. D., of Springfield, Mo.

I do not claim to have anything original or startling to advance but desire to say a few words calling attention to a subject that, I believe, should interest doctors, as a body, more generally.

The time was when the doctor, as a rule, knew little of anything except his pill bag and the condition of his patients, and that quite unscientifically; the sciences of government, sociology, economies, criminology, public health and sanitation did not arouse him to action, if they even interested him. He considered politics dirty work and left the handling of such questions to men who, many times, knew nothing and cared less about the welfare of mankind as it is portrayed under the light of these sciences. He did not wish to mix in politics because of the stigma that would go with it, rather preferring to stay out and consequently letting the greedy, self-seeking ones seize for personal gain, rather than give service to the public as a matter of scientific consideration.

He was alone then, each doctor stood by himself, but during the last decade mighty strides have been made in the profession; it has been groping in the dark and is still feeling for light, but the day is coming when the organized medical profession of the United States is going to be a great power for good and its rights will be better recognized.

We are all doubtless more or less familiar with the workings of our American Medical Association, one of the greatest medical associations in the world, if not the greatest; the organization it has built up is alone a great achievement, but the fruits of that organization are to be greater. The object of the association, as set forth in the constitution, is: "To promote the science and art of medicine; contributing to this end, the association shall endeavor to unite into one compact organization the medical profession of the United States for the purpose of fostering the growth and the diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safeguarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and the enforcement of just medical laws, of enlightening and directing public opinion in regard to the broad problems of hygiene and of representing to the world the practical accomplishments of scientific medicine."

This is a laudable object indeed, to promote the science and art of medicine, to bring it out of dark superstition, place it upon the broad,

*Read in the Medical Section, Fifty-first Annual Meeting, Springfield, May, 1908.

solid foundation of scientific thought and truth, there hold it, pointing it out to the laity, making them realize and recognize that the practice of medicine is something more than the mere bread and butter proposition to the one pursuing it, and, on the other hand, show them that the doctor not only wishes to cure the disease but also wishes to assist and point out to the citizen, the community and the nation not only how to resist disease but how to make better and healthier men and women for our country.

So the medical profession is beginning to realize that the general public has not, can not and will not solve these questions of public health and sanitation which involve great sociological, economical and even criminal problems, and they are beginning to recognize their own responsibilities which have and do grow out of their peculiar training and experiences of life and the position they hold in the community.

As our forefathers looked upon politics the epithet of "dirty work" was probably quite appropriate, and no doubt many entered that field for purely personal gain, caring nothing for public interests. The fault lay with the doctors as well as with the other good citizens who failed to become properly interested and thus left room for the self-seeking, money-grasping ones. When public interests are made a study, are made a science, the qualifications and requirements to carry that interest through for the public good, should not be looked for in just anyone who has a fancy to fill his own coffers; he should be selected from the body representing the ones best qualified in that line. In other words let the doctors for the medical institutions and positions of our state be selected from our state and county societies. Let these societies be the nominating body and in a way act as an advisory board to these public positions.

So, our idea of the doctor being in politics, is to put to practical work through the medium of our organized profession some of the theories and ideas that have and will grow as we realize more thoroughly our civic responsibilities.

Charles A. L. Reed, of Cincinnati, (Chairman of the Committee on Medical Legislation of the American Medical Association), in a paper entitled "Medical Legislators of Two Republics," compared France and the United States in regard to the number of medical men who serve their country in official positions. In the French Senate and Chamber of Deputies, about 10 per cent of the members are medical men, while in the United States Senate and House of Representatives only about 1 per cent belong to the medical fraternity. He thought we might take a lesson from France and put more doctors in our legislative halls, where they could serve the public by giving to the questions as they come up, the benefit of their peculiar training and experience, and too, that of the organized profession which would be back of them.

By the profession thus having some of their own members on the legislative floors they could demand attention and consideration when

fighting bills which mean so much to the public health and welfare of the people. Doctors grown old in the profession and rich in the experiences of the world could find no better way of serving their community, state, nation and profession than that of working in legislative halls.

Dr. Reed asks the question: "How many of us have seriously considered the duty devolving on us to carry the intelligence we have acquired in the innermost recesses of hovel and mansion, of cottage and palace and to exercise that intelligence in the halls of legislation for the benefit of the people who have trusted us?"

There is no doubt but that the doctor comes as near learning the exact condition of the home and everything emanating therefrom, as any man. When we know the homes of a community, their strong points, their weak points, we know the strong and weak points of that community, that state and nation.

The second and probably the most important way for the doctors to be in politics, or fulfill their civic duty, is through their county, state and national societies making them a power in the community, standing as one and working for those things which affect the health and well-being of the people.

Many suggestions could be given and are presented from time to time which, if carried out throughout this state, would be of inestimable value to the people and to the profession.

Some time ago an editorial in the *Journal Am. Med. Assn.*, said: "The Government to-day, which does not preserve records of births, deaths and disease, is at least fifty years behind the times," and, "no European nation, however small or insignificant, would think of doing without vital statistics and proper registration laws." Vital statistics and morbidity reports certainly ought to be found in the well regulated state we would have Missouri to be. Pennsylvania not long since adopted a model law in regard to the protection of public health. A health department with a single official at its head, under the title of the Commissioner of Health, who holds a seat in the governor's cabinet, was formed. He holds the health of the state in his hands, as it were. All vital statistics are reported and kept on record by the department, there being local registrars throughout the state. Morbidity reports are made through the physicians to the department, thus keeping the department's finger, so to speak, on the pulse of the state.

A sanitary division looks after the proper quarantining of infectious diseases and sees that the sanitary laws are carried out.

The making and distributing of antitoxin for the poor and the filing of reports made by the doctor attending the case is another beneficent work done under this department. No water works system or sewer system in the state can be established without the department investigating and approving the plans.

A well organized board of health, or health department, with power like that to give it weight, influence and standing in our State, is something that we, as a State Society, can well afford to work for.

A system of well organized local, state and national boards of health throughout the United States, all co-ordinate, yet subordinate to the national board, would be of inestimable value to our country.

To sum up the whole thing, the county society should be the business agent of the physicians of that county. That it should be made of such a power that when any new movement is on foot and especially when there are hygienic and sanitary problems to be analyzed, the opinion and advice of the society should be sought, as much as any other fraternal or commercial body.

Let the business agent, as it were, be a good citizen of his community and do all the civic good he can.

Quite true we should not neglect our papers, reports of cases, etc. which we have been going over from year to year, for we can always learn something new about disease and its treatment, but let us get out into that broader field where we will treat not only physical diseases but civic, business, social and moral diseases, not specialists, of course, but handle them in such a way that our society can and will be a source of pleasure and solid satisfaction to its members and the citizens of that community, not alone in working for the other's good, but in doing that, helping ourselves,—looking after that self-preservation and improvement which are so necessary before we can give our best.

OPTOMETRY, OR THE PRACTICE OF MEDICINE MADE EASY.

By Llewellyn Williamson, M. D., St. Louis.

Under the number House Bill No. 411, there was introduced, February 10th, in the State Legislature, by Mr. Brasfield, a bill which deserves the earnest attention and the equally earnest opposition of every medical man in the State who desires to maintain the intergrity of his profession and its honorable position. This bill, the title of which is "An act creating a Board of Examiners in Optometry, and defining and regulating the practice thereof," purports to be an effort to establish a law governing the fitting of glasses by opticians; in reality its sole effect will be to allow any one dealing in spectacles to prefix the title "Doctor" to his name, and practice medicine on that most delicate of all special organs, the eye. This the optometrists, as they call themselves, deny, stating that their object is the measuring of refraction and the fitting of lenses, and in defense of the act, they put forth specious arguments as to the benefit that will accrue to the public, and upon the basis of these arguments they even have the effrontry to solicit the support of the medical profession, and it is a regrettable fact that, in some instances, physicians have endorsed the bill through a misapprehension of its real import.

We urge upon the doctors throughout the state to look carefully into this bill, for while at first glance it may not seem to be of particular interest to the profession at large, an analysis of its purpose, together with a knowledge of what has been done under similar provisions in other states, will show that instead of being merely a measure to license opticians in the fitting of glasses, it is in reality an effort on the part of unqualified men, to enter the medical profession by a side door, thereby avoiding the labor, expense, and education required of bona fide medical practitioners.

The optometrists, as they call themselves, state that they do not intend to practice medicine because they do not wish to prescribe drugs; but the prescribing of drugs is in reality a very small part of the practice of medicine. A glance at some of the literature of the various optical colleges gives one the impression that the practice of optometry, so-called, as outlined by the college courses, is very much indeed akin to the practice of medicine. These courses consist of the anatomy and physiology of the eye and its relation to associated organs and the sympathetic system; physical optics; physiological optics; lens building; muscular imbalance; *differentiating diseases from optical conditions; diseases of the eye;* strabismus; functional nervous diseases and their cure, etc., etc. If practicing the above subjects is not practicing medicine it is very difficult to tell where the practice of medicine begins. In addition, these com-

prehensive courses are given by the optical colleges, many of which are correspondence schools, in from three to six weeks, upon the completion of which some such title as Doctor of Ophthalmology, Doctor of Optometry or Doctor of Optics, is conferred, together with a "Handsome Diploma 16 by 21 inches," and all for a cost of from $10.00 to $25.00. It is this title of "Doctor," so easily and cheaply acquired, that the optician is anxious to secure, and it is solely to enable him to practice his trade under the title of "Doctor" that bills similar to the one now pending in the Legislature, have been introduced in various states.

The diseases of the eye and their treatment, together with the correction of refractive errors, are a very important part of the practice of medicine, and require not only a thorough general medical education, but a great amount of special preparation; and if men with worse than no training are to be admitted to their practice, it is reasonable to suppose that other men with a similar lack of training will shortly be admitted to practice other medical specialties. It is not an attempt at self-preservation which should lead medical men to an earnest resistance of this invasion of the profession, for whatever may be thought of us generally by the layman, the medical profession has ever been, and always will be, the most unselfish of all avocations. The earnest efforts now being made throughout the country to raise the standard of medical education and medical ability, are not being made for the protection of the doctor, but for the protection of those dependent upon the doctor's services. In nothing is the layman so ignorant as in the real value of the medical advice which he seeks, and in no field of human labor is he so open to the wiles of the charlatan. The sick and suffering go to a physician because they believe him to be a good one, but they have no way of judging of the quality of the services which are rendered. It is for their protection from inferior services and to conserve both the health and the purse of the sufferer as well as to maintain the high character of our calling, that doctors have been for years making earnest efforts to raise the standard of medical education to the highest plane. It is to protect the layman that Boards of Health are organized, that quarantine is established, that sanitary measures are introduced, that preventive medicine is practiced; and the physician is the only laborer who is daily and constantly attempting to curtail the source of his own income. It is an honor to be a member of a profession of which this may be said, and it is only right that members of that profession should guard jealously the portal of entrance into its ranks.

Now comes the optician, who has perhaps in connection with his jewelry store and by the aid of a catalog from a wholesale house, laid in a supply of spectacles, and endeavors to enter the medical profession. That his training, experience, and usual preliminary education are totally inadequate, goes without saying, and yet he has permission to do as much, nay more, than men who have worked long and hard to master the intricacies of their calling. He tells us that he does not propose

to treat diseases but only to remedy the mechanical defects in vision by the aid of lenses, but when an eye is presented to him with deficient vision, how is he to know whether this deficiency is due to mechanical defect in the refractive apparatus or to disease of the eye itself? The key-note to all treatment is diagnosis, and a correct diagnosis of an ocular condition before treatment is instituted is as essential as a correct diagnosis of a lesion in any other organ of the body.

Any one, who has had even a slight acquaintance with the practice of ophthalmology has seen numerous cases in which this failure to diagnose correctly, because of lack of knowledge on the part of the optician, has wreaked untold injury. Simple glaucoma, in which vision goes from bad to worse, is treated by various changes of lenses by the optician, or optometrist as he now prefers to call himself, until all chance is lost for arresting the process, and neuritis and retinitis are totally overlooked; the toxic amblyopias, in which everything can be accomplished if taken in time, are allowed to go on to atrophy; these and many others afflicted with diseases of the eye, are daily victims of the optician who is utterly incompetent to differentiate these affections but is taught to believe himself "able to tell at a glance" diseases from optical conditions. These cases are numerous enough, unfortunately, under the present system and will continue as long as people are foolish enough to trust the examination of their eyes, which is a distinctly medical procedure, to men with no medical training. How much more frequent will they be, then, when people are led to believe that every man who hangs a winking eye in front of his shop and prefixes "Doctor" to his name, is a skilful ophthalmologist? for to the lay mind the difference between ophthalmologist and optometrist, or oculist and optician, is very slight indeed.

House Bill No. 411 is a distinct encroachment upon the rights, dignity and honorable status of the medical profession, as well as an attempt to legalize the practice of men who are wholly incompetent to fulfill the obligations which the Act itself imposes upon its supporters. If passed, this Act would surely result in an increase of blindness and other permanent eye affections—the prevention of which is now being earnestly studied by the medical profession.

Metropolitan Bldg.

Journal
Missouri State Medical Association.

The Official Organ of the State Association and Affiliated County Societies.
Published Monthly under the supervision of the Publishing Committee.

ADDRESS ALL COMMUNICATIONS TO METROPOLITAN BUILDING, ST. LOUIS, MO.

Volume V. MARCH, 1909. Number 9

E. J. GOODWIN, M. D., Editor.

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EDITORIAL

THE CARE OF INMATES OF STATE INSTITUTIONS.

The deplorable condition of the State penitentiary, from the standpoint of health and sanitation, as disclosed by the report of the medical committee, composed of Drs. A. H. Hamel, F. J. Lutz and Wm. Porter, recently submitted to the Senate, affords a conspicuous example of the ineffectiveness of any system of control of our penal and eleemosynary institutions, as regards the sanitation and healthfulness of the buildings, when the responsibility for the intelligent and humane execution of the office rests chiefly upon the one who is in immediate charge of the institution. Under this system the appointee is generally a person whose influence in politics is an invaluable asset to the reigning political party, and must be paid for out of the spoils of war, *i. e.*, by an appointment to an office that will reflect some honor upon the incumbent or offer some monetary remuneration; or, better still, from the viewpoint of the prospective office holder, give both honor and monetary remuneration. With this method of apportioning the rewards that come from success at the polls, we have no criticism to offer, for as things are with us such a system is inevitable; and while it may be said that appointees have been, in the main, capable persons who possessed the qualifications for the proper execution of the ordinary affairs of the offices entrusted to them, even success in politics does not justify the over-riding of humanitarian considerations in the care and treatment of the inmates of our State institutions.

The recognition of the important functions performed by the medical profession in protecting the health and lives of the inmates of State in-

stitutions induced Gov. Folk to appoint a physician upon the board of trustees of every State institution, including all educational ones. And what ought not to be overlooked is the fact that this was the first time in the history of the State that the medical profession was accorded representation upon some of these boards. That this broad policy will be followed by Gov. Hadley is almost certain if the statements made by him in his public utterances are indicative of his intentions with respect to the conservation of the public health. But the appointment of physicians upon the boards of trustees of these institutions, wise and beneficial as this action is, is not alone sufficient to guarantee to the people the highest efficiency of service to the State.

In order to secure the best results in the care and treatment of the inmates of our State institutions, the State Board of Health should be charged with the duty of supervising the medical and sanitary conditions of these institutions and be given authority to inspect them at stated times and require reports from the officers in charge, at certain intervals, such reports to include an accurate statement of the vital and mortuary statistics of the institutions. To effect this enlargement of the powers of the State Board of Health, the county societies could use their influence to educate the people as to the importance of a wider latitude in the Board's functions. Such supervisory control by the State Board of Health would impose the responsibility for the proper medical and sanitary care of the inmates, on the representative medical body of the State,—the authorized channel of communications in regard to public health matters between the people and the legislature. Had such a system of supervision been in force, the frightful condition of the penitentiary as it is to-day would in all probability never have developed, or at least the legislature would have been made aware of the danger; and the responsibility in allowing this condition to remain uncorrected, would then have rested upon that body.

THE INDUSTRIAL ASPECT OF LONGEVITY.

An illuminating suggestion, fraught with large possibilities in the great work of preventing and controling disease, comes from Dr. Irving Fisher, of Yale University, in his address upon the "Economic Aspect of Lengthening Human Life," delivered before The Association of Life Insurance Presidents in New York, on February 5th. Dr. Fisher said it was his belief that "concerted action by life insurance companies to lengthen human life would mark one of the greatest steps, if not the greatest step, ever yet taken toward the improvement of human longevity." The statement is so truthful and the practical application of

the suggestion so full of great possibilities for good as to arrest the attention of every thinker in the field of preventive medicine.

After pointing out the general truth that the success of any movement is found only when it reaches the commercial stage, Dr. Fisher said that "philanthropy is keen to lead the way to reform, but becomes a broken reed if depended upon for its support continuously or on a large scale." The truth of this statement needs no exemplification by us and Dr. Fisher's appeal was addressed not to the philanthropic spirit of the officers of these companies but to the more alluring proposition of lower death rates and longer lives; that is to say, a lesser amount to be paid in death benefits and a greater amount in premiums. But the policyholder himself is not to be the loser by such an undertaking, for the very reduction of death rate and extension of time during which premiums must be paid would enable the companies to reduce the amount of the premiums and still show an increase of revenue.

Now as to the impetus which the coöperation of the life insurance companies would give to the work of preventing and controling disease, Dr. Fisher says, most truthfully, that "the mere announcement that insurance companies intended to improve health conditions would have an effect in improving those conditions. This effect would be felt in two ways: First, it would convince millions of the ignorant and indifferent that the public health movement must have substantial merit to be an object of interest by life insurance companies. In spite of the great progress of the health movement, there are still vast hordes of our people who know nothing of it. Knowledge of its merits is largely confined to scientific and medical men, who constitute only a small fraction of the population. * * * * * Second, every health officer, every food manufacturer, every milk dealer in the United States that heard of the intention of the insurance companies to improve health conditions would become ambitious to make a good showing. Local pride in every community would result in efforts to keep abreast of the best records and avoid the reputation for being an unhealthful place to live in."

In emphasizing the practical value of this suggestion, the analogous work of fire insurance companies was referred to and the fact instanced that fire insurance companies had found it profitable to spend large sums in ascertaining the best means of preventing conflagrations, and maintained expensively equipped laboratories for testing fire-resisting materials, fire-resisting devices, new apparatus and fire prevention in general. As a result of such a campaign of education against fire—the principal object being to save money—every business man has an intimate knowledge of the laws of protection against fire. How much greater would be the reward if the life insurance companies would adopt

the suggestion of Dr. Fisher and coöperate with the Committee of One Hundred in its fight against disease and death; for here the preservation of the health and life of the nation is the goal that is sought, and the cause of preventive medicine would be advanced through numerous channels, while millions of people, now ignorant of the great work undertaken in their behalf would soon be informed with a proper knowledge of how to protect themselves against many of the diseases that now cap the list in our mortality tables.

OPTOMETRY—HOUSE BILL NO. 411—A WARNING.

The attention of our readers is directed to an article by Dr. Llewellyn Williamson on page 580, in this issue, entitled "The Practice of Medicine Made Easy." Herein is contained a clear account of the efforts made by certain opticians in this State to appear before the public in a character to which they have no claim. A perusal of Dr. Williamson's article will indicate to any unbiased reader the pernicious results that would inevitably follow the enactment of this bill into a law.

It is no new thing for wholly unqualified individuals to attempt to enter the medical profession and it is the profession's duty to protect the public from charlatans of every type. This question concerns every physician in the state, as such a law would be an entering wedge to the legalizing of various forms of medical practice which must not be entrusted to any but qualified practitioners of medicine. The specious wording of the document in question, does not reveal its true character, which is to delude the public.

Let every member of the profession in the State of Missouri, who feels that the encroachment of unqualified individuals into the medical profession is an evil to be combated, make it his business to write to his representative and senator in the Legislature, condemning this pernicious measure.

The bill is House Bill No. 411, entitled, "An Act Creating a Board of Examiners in Optometry, and Defining and Regulating the Practice Thereof."

DR. McCORMACK COMING IN MAY.

Dr. J. N. McCormack, the national organizer for the American Medical Association, will spend several weeks in Missouri during the month of May and address open meetings in various counties under the auspices of the county medical societies. There can be no doubt of the

very great importance of the work Dr. McCormack is doing, not only as to its benefit to the medical practitioner himself, but also because of the great educational value to the public. Through these lectures the public is informed concerning many topics appertaining to the conservation of the health and vigor of the people and instructed in the reasons for the accomplishment of the numerous humanitarian measures that have engaged the attention of the profession since the reorganization of the American Medical Association. Some of the things Dr. McCormack is trying to do, and has succeeded in doing in other states where he has spoken, are:

1. To build up and strengthen the county societies throughout the country.

2. To abolish the evils which have resulted from jealousy, envy and discord inside the profession; to improve the business methods of the profession, and to impress the importance of this both upon the doctors themselves and their patrons.

3. To show, not only to physicians, but to the public as well, the absolute need of compact, effective medical organization, for the sake of both the physician, his patients and the people.

4. To enlighten and instruct the general public regarding the work, mission and aims of the medical profession. That these matters are grossly misunderstood is known to every intelligent physician.

5. To remove the unreasonable and unjust prejudices against the profession, as a whole, which exists in the minds of many otherwise intelligent people and to make plain the danger to the people inseparable from poverty in the profession.

In every state which Dr. McCormack has visited his addresses have been followed by an awakening not only on the part of the public but in the ranks of the profession as well, and the sympathetic coöperation from the people toward instituting reforms and securing legislation for the protection of the lives and health of the people has brought success which could not have been accomplished without such coöperation.

In our next issue we will publish the itinerary of Dr. McCormack.

REPORT OF VITAL STATISTICS IN SPRINGFIELD.

The city of Springfield has instituted a system of health reports through the health department and a record of births and deaths is now kept by the department. Previous to November, 1908, there were no effective ordinances covering the collection of these statistics, but through the efforts of Dr. Woody, the city physician, and the members of

Greene County Medical Society, several ordinances were passed and reports of births and deaths made compulsory. An effort is being made to secure an ordinance requiring the fumigation of rooms that have been occupied by consumptive persons. The first report of the health department in Springfield was made for the month of November, 1908, and shows an annual death rate of 7 per 1000. There were 2 deaths from consumption, 1 from smallpox, 7 from diphtheria, 14 from scarlet fever and a total of 20 from all causes. The Bertillion classification is used.

PERSONAL AND NEWS NOTES

Personal.—Dr. J. Geiger, of St. Joseph, has been appointed a member of the Board of Managers of State Hospital No. 2.

Addition to Mercy Hospital.—Mercy Hospital, in Kansas City, has completed the new addition to its building. The new building will be ready early in March and will provide room for one hundred additional beds. The cost of the new building is about $35,000.

St. Joseph Academy of Medicine.—After much discussion and several conferences, a number of St. Joseph's physicians met at Hotel Robidoux February 3rd, and organized an Academy of Medicine upon lines similar to the Kansas City and Chicago societies of the same name. The new body will not in any way hamper nor embarrass the county society, but rather be supplemental to it. The club feature will be an element of weight, and later a library will be added. The following officers were elected: President, Jacob Geiger; vice-president, A. L. Gray; secretary, John M. Bell. The Committee on By-Laws, W. T. Elam, J. M. Bell, W. L. Kenney and Jacob Geiger, will report at the next meeting. Committee on Entertainment consists of J. H. Sampson and L. J. Dandurant. The papers will be of a high class, thoroughly digested and will be published in the leading medical journals at home and abroad. The society will hold its meeting every third Wednesday at Hotel Robidoux. At the first regular meeting, February 17, Dr. A. L. Gray will read a paper on "The Etiology and Treatment of Eclampsia."

American Party, Sixteenth International Medical Congress.—As a large number of American physicians will attend the Sixteenth International Medical Congress to be held in Budapesth, Hungary, August

29th to September 4th, 1909, the following itineraries have been arranged to enable the journey to be made with the maximum of comfort and enjoyment, at fixed inclusive fares: Tour A provides for a direct trip, with short trips to Paris, Berlin, Munich and Vienna, with carriage drives, visits to the hospitals, etc., in addition to the stay in Budapesth during the session of the Congress, with return to Berlin and Hamburg (41 days, $395, including hotel and all expenses). Sail from New York August 12, by North German Lloyd S. S. "Bremen." Tour B presents an opportunity of combining a visit to Great Britain, Paris and some of the points of scenic interest in Switzerland, with the opportunity of returning direct from Budapesth to New York (60 days, $540, all expenses). Sail from New York July 24th, by White Star liner "Arabic."

The business arrangements of the tour have been placed, as before, in the hands of Thos. Cook & Son, the well-known tourist agents, which insures perfect and complete service for the trip, and relieves passengers from all troublesome details incident to foreign travel. Those delegates who attended the last meetings in Madrid and Lisbon will remember the excellent service afforded them. Rooms have been specially reserved at Hotel Hungaria, Budapesth, for this party, but as the number is necessarily limited, we would advise those contemplating the trip, to book at once and secure accommodations. For further information and copy of itineraries, apply to Chas. Wood Fasset, M. D., Krug Park Place, St. Joseph, Mo.

CORRESPONDENCE

To the Editor:

The Council on Defense of Medical Research of the American Medical Association is desirous of obviating, as completely as possible, any cause for complaint against animal experimentation. Much of the "evidence" cited by hostile agitators is taken from articles in journals devoted to the medical sciences. Instances are frequently cited in which it is stated that, as there is no mention of anesthetics, the work must have been done without anesthesia.

Will you not aid the Council in its efforts by very careful examination of articles submitted to you for publication, with especial reference to the use of words likely to cause misapprehension regarding the experience of the animals used for research? And in every instance in which anesthesia is a condition in the investigation, will you not point out to authors the importance of making that fact prominent? We hope that by the coöperation of all who are interested in the promotion of medical science, the development of a public opinion hostile to medical research may be checked and that there may be a growth of popular understanding of the aims, the methods, and the significance of the results of animal experimentation.

Walter B. Cannon,
Chairman.

[Contributors are requested to bear in mind the above suggestion when preparing manuscripts for publication.—Ed.]

To the Editor:

I am contemplating going abroad for post-graduate work about the first of May and am desirous of finding a colleague for the trip. I wish you would kindly assist me in some proper manner through the columns of the Journal Missouri State Medical Association in getting into correspondence with such a person arranging for a similar trip.

S. Sanford, M. D.

Palmyra, Mo., February 13, 1909.

OBITUARY

GEORGE ROLLA HIGHSMITH, M. D.

Dr. George Rolla Highsmith died suddenly at his home in Carrollton on January 14th, aged 60 years. He was born in Savannah, Ga., December 4, 1848, and two years later his parents moved to Lincoln County, Mo. Thrown upon his own resources early in life, his opportunities for obtaining an education were meager, but his studious habits enabled him to acquire knowledge that fitted him to teach school in the country district where he lived. At the age of 19 he took a course in the normal school at Kirksville and afterwards began the study of medicine, graduating from the Missouri Medical College (now Washington University) in 1875. Immediately after his graduation he located at DeWitt, Mo., where he practiced until 1888, when he moved to Carrollton and remained an active worker in the profession until his death. Dr. Highsmith was a believer in medical organization and this is evidenced by the numerous medical societies of which he was a member. He was president of the Carroll County Medical Society at the time of his death, president of the Missouri State Medical Association in 1899, and an ex-president of the Wabash Railway Surgeons' Association; he was also a member of Grand River District Medical Society, North Missouri District Medical Society, Tri-State Medical Society, Western Surgical and Gynecological Association, Missouri Valley Medical Society, International Association of Railway Surgeons, Atchison, Topeka and Santa Fe Railway Medical and Surgical Association, and the American Medical Association.

Dr. Highsmith was a strong advocate of higher education, not only as applied to the medical practitioner, but in all walks of life. He assisted in organizing the first county institute in Carroll County and was himself one of its leading teachers. As a physician Dr. Highsmith endeared himself to all who called upon him for relief in time of suffering, and his kind, sympathetic and genial nature made him a welcome counsellor at all times. The entire community in which he lived mourns for the loss of one who had become a dear and sure friend, and the profession is deprived of the services of one who was ever ready and able to render yeoman service in its fight against disease and distress.

Dr. John S. Logan of St. Joseph, died very suddenly as the result of an accidental fall on January 18, 1909. Dr. Logan was 77 years of age. He was born in Shelbyville, Ky., June 25, 1836, and received his early education at the Shelby College and the Kentucky Military Institute. In 1857 he came to Missouri with his stepfather and mother, who located at St. Joseph and here Dr. Logan took up the study of medicine in the office of Dr. Alexander Schue. Later he went to the Kentucky Medical School, from which he received his medical degree, and took a post-graduate course in the Jefferson Medical College. During the Civil War

Dr. Logan served as surgeon in the Union army, being assigned at different times to the hospitals in St. Louis, Evansville, Jeffersonville, Camp Holt, Ind., and Camp Gamble, near St. Louis. After the close of the war he returned to his home in St. Joseph but although he continued to interest himself in medical affairs, he did not again become active in the practice of his profession, but devoted his time almost exclusively to business and financial affairs.

CLARENCE F. ROBERTS, M. D.

Dr. C. F. Roberts, of Kansas City, Mo., died at his home after an illness of several months on December 27th, 1908. Dr. Roberts was born in Iowa, February 19, 1871, and two years later his parents moved to Winfield, Kansas. He was educated at the Southwestern University and obtained his medical degree at the Ohio Medical College in 1895. He served as an interne in the Good Samaritan Hospital for one year and then began to practice in Nevada, Mo., where he remained until 1901. In that year he moved to Kansas City, where he continued the practice of his profession until the time of his death. Dr. Roberts possessed all the qualifications that make for the earnest physician and kind counsellor in sickness, and he came to be recognized as a man of unusual strength and sound judgment in all his work as a practitioner of medicine. He was a member of Jackson County Medical Society, the Missouri State Medical Association and the American Medical Association.

BENNO BRIBACH, M. D.

Dr. Benno Bribach died at his home in St. Louis on January 29, after an illness extending over a period of two years. Dr. Bribach was born in Heuchwalde, Saxony, Germany, in 1846. He received his early education in his native country, and also studied in London. He came to Missouri in 1868, and in 1880 he graduated from the Missouri Medical College. He began the practice of his profession in St. Louis where he remained until the time of his death. Dr. Bribach was a member of the St. Louis Medical Society, the Medical Society of the City Hospital Alumni, the Missouri State Medical Associaiton, and the American Medical Association.

FIFTY-SECOND ANNUAL MEETING, JEFFERSON CITY, MAY 18-21, 1909.

PRELIMINARY PROGRAM.

SURGICAL SECTION.

Edward G. Blair, M. D. ..... Kansas City
"The Treatment of Parenchymatous and Exophthalmic Goitres."

Vilray Papin Blair, M. D. ..... St. Louis
"The Proper Age at Which to Operate for Clefts of the Hard Palate."

Rodney J. Bunch, M. D. ..... St. Louis
"Surgical Treatment of Amebic Dysentery by Appendicostomy."

G. Wiley Broome, M. D. ..... St. Louis
"Compound Fractures and Remote Effects Under Prevailing Treatment."

James Moores Ball, M. D. ..... St. Louis
"Dr. Adam Hanmer, Surgeon and Apostle of Higher Medical Education."

W. H. Coffey, M. D. ..... Kansas City
"Excision of Lower Part of Rectum." Report of Case.

A. H. Cordier, M. D. ..... Kansas City
"Neoplasm of the Testicle."

G. W. Cale, Jr., M. D. ..... St. Louis
"A Case of Congenital Absence of the Gall Bladder, in Which Appendicitis Produced the Symptoms of Gall Stone Disease."

H. S. Crossen, M. D. ..... St. Louis
"Ectopic Gestation Symptoms in Gonorrhœal Salpingitis Cases."

Jno. McH. Dean, M. D. ..... St. Louis
"Dysmenorrhœa."

Wm. S. Deutsch, M. D. ..... St. Louis
"Stunts in Surgery."

Davis Forster, M. D. ..... St. Louis
"Ovarian Tumor Complicating Pregnancy, With Recovery After Operation."

Robt. M. Funkhouser, M. D. ..... St. Louis
"Some Remarks Regarding Gall Bladder Disease."

Pinckney French, M. D. ..... St. Louis
"Abdominal Incision."

George Gellhorn, M. D. ..... St. Louis
"The Causes of Amenorrhœa."

B. Clark Hyde, M. D. ..... Kansas City
"Report of a Case of Shoulder-Joint Amputation with Peculiar Sequelæ."

Ernst Jonas, M. D. ..... St. Louis
"Undescended Testicle and Malignant Degeneration."

Jabez N. Jackson, M. D. ..... Kansas City
"Membranous Pericolitis."

Walter C. G. Kirchner, M. D. ..... St. Louis
"Illustrative Cases of Intestinal Obstruction, With Remarks on Diagnosis and Treatment."

T. F. Lockwood, M. D. ..... Butler, Mo.
"Problems and Possibilities of a Country Practitioner from a Surgical Standpoint."

W. E. Leighton, M. D. ..... St. Louis
"Anæsthesia."

A. B. Miller, M. D. ..... Macon, Mo.
"The Relation of the Physician and Surgeon in Appendicitis Cases."
C. C. Morris, M. D. ..... St. Louis
"Practical Points in Abdominal Surgery."
J. H. Morroway, M. D. ..... Ridgeway, Mo.
"Some Diagnostic Points."
Max W. Myer, M. D. ..... St. Louis
"Regurgitant Vomiting, Due to Unusual Adhesions, Following Gastro-enterostomy with Pyloric Exclusion."
Ernest G. Mark, M. D. ..... Kansas City
"Bladder Stone: Its Diagnosis and Treatment."
C. M. Nicholson, M. D. ..... St. Louis
"A Study of the Action of Scopolamine-Morphine on the Heart, Liver and Kidneys, with a Report of Six Hundred and Fifty Cases of Scopolamine-Morphine Administered as a Preliminary to General Anæsthesia."
Archer O'Rielly, M. D. ..... St. Louis
"Modern Ideas of Chronic Rheumatism."
T. E. Potter, M. D. ..... St. Joseph, Mo.
"Intestinal Obstruction with Special Reference to Paresis of the Bowels."
Louis Rassieur, M. D. ..... St. Louis
"Report of Two Cases of Injury to the Heart."
J. H. Roney, M. D. ..... Lawson
"Skin Stretching and History of Cases."
Francis Reder, M. D. ..... St. Louis
"Remarks on Tumors of the Parotid Gland."
Robert E. Schlueter, M. D. ..... St. Louis
"Remote Effects of Abdominal Injuries."
M. G. Seelig, M. D. ..... St. Louis
"The Physiology of Shock."
Jno. D. Seba, M. D. ..... Bland
"The Open Method of Treating Infected Joints, with Report of a Case."
Wm. W. Stevens, M. D. ..... Kansas City
"Anæsthesia."
C. H. Suddarth, M. D. ..... Smithville, Mo.
"Radical Operation for Hernia; as Seen by the Country Surgeon."
J. H. Tanquary, M. D. ..... St. Louis
"Fracture of the Neck of the Femur."
Luther A. Todd, M. D. ..... St. Joseph
"A Critical Review of a Series of Appendix Cases."
A. H. Vandivert, M. D. ..... Bethany
"The Country Doctor."
J. S. Wallace, M. D. ..... Brunswick
"Modern Methods in the Surgical Treatment of Rectal Diseases."
C. W. Watts, M. D. ..... Fayette
"Report of a Case of Osteosarcoma."
Charles Hodge Wallace, M. D. ..... St. Joseph
"Unilateral Suppurative Infection of the Kidney."

The following have promised papers, but as yet have not submitted titles:

John Young Brown, M. D. ..... St. Louis
Walter B. Dorsett, M. D. ..... St. Louis
Bransford Lewis, M. D. ..... St. Louis
Fritz J. Moenninghoff, M. D. ..... Kansas City

PRELIMINARY PROGRAM.

MEDICAL SECTION.

Scott P. Childs, M. D. ..... Kansas City
Subject to be announced.

C. O. Dewey, M. D. ..... Breckenridge
"Progress in Medicine and Surgery."

William Engelbach, M. D. ..... St. Louis
Subject to be announced.

T. F. Frazer, M. D. ..... Commerce
Subject to be announced.

Frederick W. Froehling, M. D. ..... Kansas City
Subject to be announced.

G. E. Gwinn, M. D. ..... Bethany
"Catarrh of the Middle Ear."

J. Phillip Kanoky, M. D. ..... Kansas City
"Verucæ Plantares et Palmares."

John W. Marchildon, M. D. ..... St. Louis
"Serum Diagnosis of Syphilis."

H. S. Major, M. D. ..... Hardin
Subject to be announced.

J. S. Newton, M. D. ..... Butler
Subject to be announced.

J. B. Norman, M. D. ..... California
"Emergency Surgery in the Country."

W. A. Patterson, M. D. ..... Tipton
"Scientific Therapeutics."

EYE, EAR, NOSE AND THROAT SECTION.

D. C. Adcock, M. D. ..... Warrensburg
"Nasal Obstructions as Causative Factor of Disease of Ear and Throat."

C. Barck, M. D. ..... St. Louis
"My Operation for the Extirpation of the Lachrymal Sac."

Robert Barclay, M. D. ..... St. Louis
"Interesting Problems in Ear, Nose and Throat Practice."

Theodore A. Coffelt, M. D. ..... Springfield
"Irido-Cyclitis."

Fayette C. Ewing, M. D. ..... St. Louis
"Our Overstocked Instrument Case; a Plea for Operative Simplicity."

John C. Faris, M. D. ..... Pemiscott
"Adenoids."

Hal Foster, M. D. ..... Kansas City
"The Prevention of Ear Disease."

Max Goldstein, M. D. ..... St. Louis
"Lantern Demonstration of Anatomy and Pathology of the Accessory Sinuses."

John Green, Jr., M. D. ..... St. Louis
"The Art of Refraction."

P. I. Leonard, M. D. ..... St. Joseph
"Ocular and Aural Prophylaxis."

W. H. Minton, M. D.....St. Joseph
"Ocular Diseases Due to Systemic Influences."
C. A. Moore, M. D.....Springfield
"Reflex Disturbances of Hypertrophied Turbinates."
C. F. Pfingsten, M. D.....St. Louis
"Labyrinthian Affections."
Barton Pitts, M. D.....St. Joseph
"Ophthalmological Experience."
Wm. E. Sauer, M. D.....St. Louis
"Otitic Sinusphlebitis and Thrombosis. With Report of a Case of Phlebitis and Thrombosis of Lateral Sinus and Jugular Vein."
H. G. Savage, M. D.....Warsaw
"Nasal Obstruction: Some of Its Causes, Effects and Treatment."
Flavel B. Tiffany, M. D.....Kansas City
"Glaucoma."
Charles Wyche, M. D.....St. Louis
"Inspection of School Children with Special Reference to the Nose and Throat."
Llewellyn Williamson, M. D.....St. Louis
"Penetrating Wounds of the Eyeball."

THE MISSOURI SOCIETY OF MEDICAL SECRETARIES.

PROGRAM.

1. The Missouri State Medical Association: What it Should Mean to Missouri Doctors.....By Dr. W. B. Dorsett, St. Louis
2. What it Should Mean to the State at Large, ...By Dr. M. P. Overholser, Harrisonville
3. Scientific Work in County Societies. By Dr. W. T. Elam, St. Joseph
4. The Social Side of the County Organization, ...By Dr. H. S. Majors, Hardin
5. The Secretary's Work from a Business Standpoint, ...By Dr. E. N. Chastain, Butler
6. How to Interest the Eligible Non-Members in County Society Work and How to Get a Good Attendance at the Meetings, ...By Dr. A. H. Thornburg, West Plains
7. The State Journal: What Is Should Mean to the Individual Members.....By Dr. L. W. Dallas, Hunnewell
8. What the County Secretary Can Do to Make the State Journal a More Forceful Element in Medical Organization, ...By Dr. E. J. Goodwin, St. Louis
9. Prosecution of Irregulars: The Experience of a County Secretary.....By Dr. M. A. Smith, Gallatin
10. The Missouri Society of Medical Secretaries: Its Objects and Its Destiny.....By Dr. A. W. McAlester, Jr., Kansas City

COUNTY SOCIETY NOTES

To County Secretaries:

I beg to remind you that a correct list of your officers for the current year should be mailed to this office without further delay, in order that a revised list of members in our organization may be compiled. Preparations are in progress for our meeting in May, due notice of which will be mailed each member. In the meantime, if any secretary has any suggestions to offer for the good of the order, the undersigned will be glad to receive them. Charles Wood Fassett,

Secretary, The Missouri Society of Medical Secretaries, St. Joseph, Mo.

CALDWELL COUNTY MEDICAL SOCIETY.

The Caldwell County Medical Society met in Breckenridge on January 20th. Dr. C. O. Dewey, the retiring president, in the absence of the president and vice-president elect, presided. The attendance was small on account of bad weather.

Dr. O. N. Thompson, formerly of Lock Springs, Daviess County, Mo., but now of Breckenridge, was admitted as a member of our Society on a certificate from the Daviess County Medical Society.

Dr. W. M. Duffie read a paper entitled "Implied Impressions," which was discussed by all present.

Dr. G. W. Goins read a paper entitled, "Rheumatism and Allied Diseases." The paper was well received and discussed by all present.

By resolution the councilor of the 12th Councilor District was requested to call a meeting of the physicians in this district to be held at Cameron not later than April 1st, for the purpose of organizing a district medical society.

The next meeting will be held at Hamilton in April.—Tinsley Brown, M. D., Secretary.

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY.

The Cape Girardeau County Medical Society held its regular monthly meeting on February 8th, at Cape Girardeau, with the following members present: Drs. Cunningham, Dalton, Henderson, Hope, Howard, Moore, Rosenthal, Schultz, Tarlton, Wichterich and Wilson.

The scientific work for the evening consisted of the following symposiums:

Scarlet Fever: History and Pathology, by Dr. Cunningham. Symptomatology, Diagnosis and Treatment, by Dr. Wilson.

Measles: History and Pathology, by Dr. Hope. Symptomatology, Diagnosis and Treatment, by Dr. Howard.

All the papers were discussed and the friendly spirit which prevailed showed that the county medical society was a good thing and that the members profited much by the meetings.—E. H. G. Wilson, M. D., Secretary.

GREENE COUNTY MEDICAL SOCIETY.

The Greene County Medical Society met in Springfield, January 22d, 1909, with a good attendance.

The newly elected president, Dr. Fuson, read his address. The treasurer made his annual report and the reports of various committees were heard.

Dr. Reinhoff presented a very carefully prepared paper on "Puerperal Infection," describing in detail the etiology and pathology. He also gave an extensive account of the different methods of treatment, both medical and surgical. The paper was thoroughly discussed by various members of the society.

MEETING OF FEBRUARY 12TH.

The auditing committee reported favorably on the treasurer's report.

Dr. Coffelt read a very interesting paper on "Inflammations of the Iris and Ciliary Body." He went into the pathology of the condition very thoroughly and dwelt upon various causes of the trouble, both constitutional and local, pointing out the means of differential diagnosis. The paper was thoroughly discussed by the members present.

MEETING OF FEBRUARY 24TH.

An interesting paper on "Diseases of the Prostate" was read by Dr. C. E. Fulton. A discussion of the paper followed, led by Drs. Fortner and Terry. Nearly all of those present took part in the discussion and the meeting was very interesting and helpful.

At the next meeting Dr. J. E. Tefft will read a paper on "Diagnosis of Diseases of the Genito-Urinary Organs." At the meeting following that, Dr. Wilbur Smith will read a paper on "Methods of Treatment for Diseases of the Genito-Urinary Organs."—J. E. Dewey, M. D., Secretary.

HENRY COUNTY MEDICAL SOCIETY.

The Henry County Medical Society met in regular session in Clinton, on Wednesday, February 17th, 1909.

The President, Dr. W. W. Gibbins, delivered an address on the good of the county medical society to all the members of the profession, both of the city and country. The interchange of ideas and the relating of cases for comparison of diagnosis and treatment, he said, are of the greatest advantage and broaden our knowledge of how to handle cases.

The address was discussed by Drs. J. W. Britts, W. M. Shankland and A. J. McNees, each speaking of the benefits derived individually by being a regular attendant and participating in the discussions.

Dr. W. M. Shankland related a case of hysteria with a fatal termination, but presenting no symptoms of any complication.

Dr. McNees spoke of a case of hysteria that at one time showed a few symptoms of encephalitis but is now improved.

Dr. Britts mentioned his method of treating a number of cases of throat trouble, recently under his care, in which he administered antitoxin as a preventive against diphtheritic development.

Dr. Gibbins related the histories of a number of cases similar to the ones reported by Dr. Britts.

Dr. James E. Neeley was present and spoke of the benefit he had received from attending the Tri-County Society as a member, and wished to join this Society; by vote he was gladly received as a member.—F. M. Douglass, M. D., Secretary.

HOWARD COUNTY MEDICAL SOCIETY.

The Howard County Medical Society met at Fayette, on February 5th, and held a very interesting and profitable session. The following members were present: Drs. Burgwin, Givens, Wright, Lewis, Bonham, McGee, Moore and N. E. Smith.

Our District Councilor, Dr. A. R. McComas, paid us a visit at this meeting and in a very interesting talk emphasized the importance of the county medical society and its beneficial influence not only upon the members themselves in their professional work, but also as a factor in establishing closer relations between the physicians and the public. The Society enjoyed the visit of Dr. McComas very much and his talk has stimulated the interest of members in county society work.

Drs. C. W. Watts and N. E. Smith presented a very interesting case of osteosarcoma of the femur. Drs. Watts and Smith treated the case by operation on September 27th, 1908, and a second operation was later performed at a hospital in St. Louis. At present the patient appears to be in good condition and there is no evidence of a return. The wound has healed entirely and the cicatrix appears healthy. The Society requested Dr. Watts to report the case at the next meeting of the State Association.

Dr. N. E. Smith, of Fayette, was unanimously endorsed as candidate for the office of coroner of Howard County and the Governor was petitioned to nominate Dr. Smith for this office.

The Society also strongly endorsed the bill now before the General Assembly, providing for registration of vital and mortuary statistics for the State.

The next meeting will be held on the first Friday in March.—C. W. Watts, M. D., Secretary.

PETTIS COUNTY MEDICAL SOCIETY.

The regular meeting of the Pettis County Medical was held on January 11th at the office of Dr. Charles B. Trader, Sedalia.

Dr. S. G. Kelly read a paper on "Mastoids," the following members participating in the discussion: Dr. M. T. Collins, Dr. W. O. Dunlap,

Dr. C. Bohling, Dr. Trader, Dr. W. G. Cowan and Dr. W. J. Ferguson.

STE. GENEVIEVE COUNTY MEDICAL SOCIETY.

The Ste. Genevieve County Medical Society held its regular monthly meeting February 10, 1909, with President Hinch in the chair.

The application of Dr. Edwin E. Whiteside, of River Aux Vases, was voted on and he was unanimously elected a member.

The next meeting will be held on the second Wednesday in March. —R. W. LANNING, M. D., Secretary.

ARTICLES APPROVED BY THE COUNCIL ON PHARMACY AND CHEMISTRY.

LAMINOIDS FERRUGINOUS (NASCENT).

Each tablet contains iron sulphate and sodium bicarbonate in quantities equivalent to those of pilulæ ferri carbonatis (Blaud's pills), but the two salts are separated into two layers so that the formation of ferrous carbonate will occur only when the tablets are moistened. An excess of bicarbonate is present to neutralize the acid in the stomach.

Dosage.—The same as Blaud's pills. Prepared by Schieffelin & Co., New York.

LENNIGALLOL.

Lenningallol, $C_6H_3(CH_3CO_2)_3$=$C_{12}H_{12}O_6$, is triacetyl-pyrogallol obtained by replacing the hydroxyl groups of pyrogallol with acetyl groups.

Actions and Uses.—Lennigallol is said to be non-poisonous and non-irritating, but a mild and painless corrosive. It is introduced as a substitute for pyrogallol in psoriasis, lupus, acute and subacute eczema of children and other skin diseases. Dosage.—In 5 to 10 per cent. ointment with zinc oxide. Manufactured by Knoll & Co., Ludwigshafen a. R.

LIQUOR TRITICI.

A solution of which each Cc. (15 minims) is said to represent 1.75 Gm. (27 grains) of triticum repens in a menstruum containing 23.5 per cent. of alcohol.

Dosage.—4 Cc. to 16 Cc. (1 to 4 fluidrams) at intervals of from two to four hours. Prepared by Parke, Davis & Co., Detroit, Mich.

LITHIUM ICHTHYOL.

A lithium derivative of ichthyol. It is a dark brown mass, somewhat more consistent, but otherwise resembling ammonium ichthyol in appearance.

Actions and Uses.—It is an antiseptic and bactericide. It is recommended as a wound antiseptic and in syphilis. Manufactured by the Ichthyol Co., Hamburg (Merck & Co., New York).

LYCETOL.

Lycetol, $NH\begin{matrix}/CH(CH_3).CH_2\backslash\\\backslash CH_2.CH(CH_3)/\end{matrix}NH.COOH.CHOH.CHOH.COOH$=$C_{10}H_{20}O_6N_2$, is a tartrate of a methyl derivative of diethylenediamine (piperazine).

Actions and Uses.—Lycetol is claimed to be a serviceable diuretic and uric acid solvent. It is said to be free from disturbing effects on the stomach and to be well tolerated for long periods. Dosage.—1 to 2 Gm. (15 to 30 grains), well diluted and preferably in carbonated water, sweetened with sugar if desired. Manufactured by Farbenfabriken, vorm. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

NOVOCAINE.

Novocaine, $C_6H_4.NH_2(COO.C_2H_4.N(C_2H_5)_2,HCl)$=$C_{13}H_{21}N_4Cl$, is the monhydrochloride of para-aminobenzoyldiethylaminoethanol.

Actions and Uses.—It is a local anesthetic similar to cocaine, but said to be far less toxic than any of the cocaine substitutes. When injected subcutaneously it is said to exert a prompt and powerful anesthetic action, but the effect is not sustained. This may be remedied by the simultaneous injection of suprarenal alkaloid. Novocaine is not irritant. It is recommended in all cases in which cocaine is indicated. Dosage.—For infiltration anesthesia, solutions of 0.25 Gm. (4 grains) novocaine in 100 or 50 Gm. (3.2 or 1.6 ounces) physiologic salt solution, with or without 5 or 10 drops of suprarenal alkaloid solution (1-1000); for instillations and injections, solutions of 0.1 Gm. (15.4 grains) novocaine in 10 or 5 Gm. (150 or 75 grains) salt solution, with or without 10 drops of suprarenal alkaloid solution (1:1000). In ophthalmology, 1 to 5 to 10 per cent. solution and in rhinolaryngology 5 to 20 per cent. solu-

tions are recommended, with the addition of 6 to 8 drops of suprarenal alkaloid solution (1:1000) to each 10 Cc. (160 minims). Internally, owing to its feeble toxicity, it may be given in doses up to 0.5 Gm. (7½ grains) to adults. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a M. (Victor Koechl & Co., New York).

ORTHOFORM-NEW.

Orthoform-new, $C_6H_3.(COO.CH_3)(NH_2)(OH)$, 1:3:4$=C_8H_9O_3N$, is the methyl ester of meta-amidopara-oxybenzoic acid.

Actions and Uses.—Orthoform-new is a local anesthetic, resembling cocaine in its local action, but not penetrating the tissues on account of its insolubility. It has practically no action on the unbroken skin and produces no irritation except slight corrosion about the place of application. It is somewhat antiseptic and practically non-toxic in the usual doses. It is used internally to relieve the pain of gastric ulcer. Since it acts only on ulcerated surfaces, the relief of pain has been assumed to be evidence of the existence of an open ulcer. It has been applied locally as an analgesic to wounds of every description. It has been used in dentistry, in nasal catarrh, hay fever, etc. Dosage.—Internally, 0.5 to 1 Gm. (8 to 15 grains) in emulsion; locally, in substance as a dusting powder or mixed with milk sugar for insufflation, dissolved in ether and mixed with oil for pencilings, or as salve with wool fat (lanolin), etc. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ORTHOFORM-NEW HYDROCHLORIDE.

Orthoform-new hydrochloride, $C_8H_9O_3N.HCl$, is the hydrochloride of meta-amido-para-oxybenzoic methyl ester.

Actions and Uses.—The actions, uses and dosage of this compound are similar to those of orthoform-new, which see. Manufactured by Farbwerke vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York.)

OVOFERRIN.

Ovoferrin is a solution containing 5 per cent. of an artificial proteid-product in which iron is present in the so-called "organic" or "masked" form (a form which does not give the iron-test directly). The solution also contains 10 per cent. of alcohol and some aromatics.

Actions and Uses.—Ovoferrin is not appreciably affected by the gastric juice, a 0.5 per cent. solution of hydrochloric acid liberating its iron very slowly and incompletely. The product ranks with the other forms of artificially masked iron, which are devoid of the local action of the soluble inorganic iron salts, and, according to some authorities, are more readily absorbed and utilized. Dosage.—8 to 16 Cc. (2 to 4 fluidrams) corresponding to from 0.03 to 0.06 Gm. (½ to 1 grain) three times a day. Manufactured by Barnes & Hille, Philadelphia.

OXAPHOR.

Oxaphor is a 50 per cent. solution of oxycamphor.

$C_8H_{14}\begin{matrix}/CHOH\\ \backslash CO\end{matrix}=C_{10}H_{16}O_2$, a derivative of camphor in which a hydrogen atom has been replaced by a hydroxyl group.

Actions and Uses.—Oxaphor is a depressant to the respiratory center, but is said to have no effect on circulation and secretion. It is recommended as a substitute for morphine in respiratory disorders, chiefly in cardiac dyspnea and asthma. It is said to have been used with advantage in renal affections, in emphysema, bronchitis, etc. Freedom from undesirable side effects is claimed as an advantage over morphine. Dosage.—2 to 3 Gm. (30 to 45 grains) of oxaphor in a little water, wine, syrup or other desirable adjuvant. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

PHENACETIN.

A name applied to Acetphenetidinum, U. S. P. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

BOOK REVIEWS

Diseases and Surgery of the Genito-Urinary System. By Francis S. Watson, M. D., Senior Visiting Surgeon to the Boston City Hospital, Lecturer on Genito-Urinary Surgery in the Harvard Medical School, Boston, and John H. Cunningham, Jr., M. D., Assistant Visiting Surgeon to the Boston City Hospital, Member of the American Association of Genito-Urinary Surgeons. In two very handsome octavo volumes containing 1101 pages, with 454 engravings and 47 full-page colored plates, mostly from original drawings. Price for the complete work: Extra cloth, $12.00, net; Half Persian Morocco, gilt tops, *de luxe*, $17.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

A new mark is set by this book in point of sumptuousness, and yet it is in entire harmony with its contents. The authors have provided a wealth of effective illustrations most artistically drawn and colored, and the publishers have executed them in their full value. They are vivid and realistic in high degree. The text is artistically printed to conform, and the result is harmonious and pleasing.

The importance of the subject warrants such a work. The male half of humanity has a multitude of diseases and shares a number of them with the other sex. The genito-urinary field is accordingly very broad and productive, particularly as the mental and physical urgency of these troubles forces the sufferers to seek relief. Immense progress has been made in recent years, and many diseases hitherto intractable or incurable have been transferred to the other side of the line. This work is not only one for the specialist, but also for the general surgeon and the practitioner who takes any cases in this borderland territory. It speaks with the highest authority, but simply and plainly and with full directions as to treatment.

The Principles of Pathology. Volume I. General Pathology. By J. George Adami, M. A., M. D., LL.D., F. R. S., Professor of Pathology in McGill University, Montreal. Octavo, 948 pages, with 322 engravings and 16 plates. Cloth, $6.00 net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

Adami's book admirably demonstrates the certainty that pathology will become a branch of science, not only of medical science, but also in the whole domain of so-called biologic investigations. The title of "Principles of Pathology," is well adapted to the trend of the author's representation of the subject. It conveys the thought that the stress is not laid on pathologic changes as such, but in their relation to the whole organism. In single problems this method has been followed in a number of publications and to extend it to the whole of pathology is the great merit of Adami. Naturally the inequality between the number of questions that have been answered and those that are as yet unanswered is greatly in favor of the latter. It is necessary, therefore, that the single subjects represented by the same author all have the same character when dealing with them, just as in Herbert Spencer's many volumes,

the first of which will say what the others will contain as to interpretation and significance of the problems. Nevertheless the single subjects are dealt with in a way that his consideration of their specialty as such, and the great ingenuity of connecting them with others is astounding.

The language and style makes its reading a pleasure, while impressing on the reader, and particularly the worker, the ways in which the nature of obscure and difficult phenomena can be made clear to the understanding. The book is said to be published for students and physicians. This is either modesty or a mistake of the author, for to read and be benefited by this work one needs a knowledge of the subject that students cannot be expected to possess and only specially trained physicians have. It is a book for any worker in pathology and general biology; it will elevate their appreciation of the offered opportunity to work with a wider interest in a seemingly limited range of objects. Adami's book is a classic, and with eagerness we will look for the second volume that is to contain what is usually called Special Pathology.

C. Fisch.

Modern Medicine.. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by William Osler, M. D., Regius Professor of Medicine in Oxford University, England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. Assisted by Thomas McCrea, M. D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 900 pages each, illustrated. Volume V, Diseases of the Alimentary Tract. Price per volume: cloth, $6.00 net; leather, $7.00 net; half morocco, $7.50 net. Lea & Febiger, Publishers, Philadelphia and New York, 1908.

This great work goes steadily forward to completion, the fifth of the seven volumes now being fresh from the press. It covers the field of Diseases of the Digestive System and furnishes a thoroughgoing and authoritative exposition of a group of primary importance. The convenience of having the whole of the great divisions of diseases in single volumes has evidently been borne in mind, and the same idea of logical classification and arrangement has been carried out even to the paragraphing, so that any desired item of information can be quickly found. Nothing could be simpler or better than the uniform presentation of each disease in sections dealing with the cause, pathology, symptoms, diagnosis, course and prognosis, and treatment. The paramount importance of the latter is recognized in the fulness with which it is considered.

Practical Medical Series; Nervous and Mental Diseases.—By Hugh Patrick, M. D., and Charles L. Mix, M. D., of Northwestern University, Chicago. Year Book Publishing Co. Price, $1.25.

The volume on Nervous and Mental Diseases of the Practical Medical Series contains articles covering all the work done along this line during the year1906-7. The men who read the standard medical journals, will be more or less familiar with a large part of the contents of this volume, as most of the subject matter has appeared in the best journals in the last year. The book is well written, has some very good illustrations and is completely indexed.